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ECONOMIC SOCIETY

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EUROPE AND ENGLAND, 1715-1815
JEREMY BENTHAM

ECONOMIC SOCIETY

AN INTRODUCTORY
SURVEY OF ECONOMIC THEORY

By
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B.A. " " "

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SECOND EDITION



WILLIAM HEINEMANN LTD
LONDON :: TORONTO

First Published February 1933
Revised Edition September 1933
Reprinted February 1934
June 1938
Second Edition 1947

Published by
William Heinemann Ltd
99 Great Russell Street, London, W C 1
Printed in Great Britain by the Publishers at
The Windmill Press, Kingswood, Surrey

MARY
CICELY GEOFFREY

uxori dilectae
liberisque carissimis

PREFACE

THIS book is intended to meet a need which is daily becoming more vocal and insistent, the need for a simple and lucid account of the mechanism of economic society.

I have so frequently seen the utter bewilderment of beginners, adults as well as adolescents, on facing economic text-books. Of one of these it has even been proudly remarked that "to understand it was a good intelligence test." I have tried to avoid similar obscurity and profundity. I have written in the simplest language. I have given illustrations from everyday life. I have written, in a word, for beginners who come to the study of Economics from varying motives, either from a genuine desire to seek an explanation of the mechanism of which they are a part or, as students, from the more utilitarian need of passing the examinations set by Schools and Universities.

The study of economics is encroaching very rapidly on the school curriculum, and the students for the School Leaving Examinations need special guidance in a new study and through the labyrinth of theories and discussions which many economic text-books contain. The adult student who is beginning the study of economics finds that many books which are recommended to him are (as so many have told me) "mere words." I have tried to advance from the simple to the complex, to use the reader's knowledge and daily experience on which to build the groundwork of economic science.

This book does not, of course, claim to be an addition to the body of economic knowledge. It merely attempts to give an introductory account to the beginner. The method I have adopted is to write clearly, and when controversy over a problem is acute, to state as fairly as I am able both sides

and to show where further information on the difficulty can be obtained.

This book will especially meet the needs of the growing body of students who are preparing to pass the syllabus in this subject for the School Leaving Examinations, for I have carefully tested the book with such candidates. In order to avoid difficulty and to help in the actual learning, I have at the end of the book added a summary of each chapter as well as questions on the matter contained therein. The questions have in most cases been taken from the examination papers set by various authorities. These should prove useful to schools as well as to adults beginning the study of so complex a science.

PREFACE TO THE THIRD EDITION

To this new edition, I have added four chapters on some of the economic problems of the twentieth century. For the pace of economic change has gathered momentum. New research, new experimentation, new "plans," the impact of politics on economics, have all contributed to economic growth.

I am indebted to many books and journals; more especially, I must acknowledge my debt to the Information Service of the Association for Education in Citizenship. In the choice and presentation of the matter, I have been guided by the demands of the Higher School Certificate Examinations, and above all by the needs of the young men and women who are coming to the study of economics without any previous teaching or training in the science.

V. C.

August, 1946

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CHAPTER I

WORK AND WANTS

IF the Martians ever sent a deputation to study the Earth and its inhabitants, their Report would read strangely to our ears. Its compilers would no doubt marvel at the greenness of our fields and the blueness of our skies; they might comment learnedly on the greater force of gravity on this planet. But they would probably reserve their greatest surprise for giving their account of the inhabitants of the Earth. For they could not but note how on the Earth, and especially in the more advanced portions, everybody worked, all appeared busy. Some were digging the soil, others fishing in the seas, and others again working down mines. In large shelters there were many making clothing to protect their bodies from the cold and wet, whilst others were hammering away in larger sheds making articles from the trees which grew on the earth's crust or from the metals which had been dug from the soil.

Had they taken up position at a railway station of any large city, they would have seen passengers alight and stream to their tasks with the confidence born of habit and of a known goal. They would have seen trains come and go with a regularity that implied careful planning and organisation. In the towns themselves, they would note the pleasure-seekers, the palatial shops, the crowded thoroughfares. And a close observation would show them the great variety of food, the water supply in every house and lighting in every street.

Occasionally they might be puzzled at the tragic sight of one set of workfolk trudging to seek work in the cities, and crossing others seeking work in the country, or of some houses well stocked with luxuries whilst in other homes there was

want. But in summing up their Report, the Delegates would record that on Earth most people appeared to work, and that there apparently existed some Order and Method in all the varied and multifarious tasks performed.

And, indeed, that would not be an untrue picture of the economic situation. Apart from any desire to be healthily active, Man works for an economic purpose. Man works because he has wants to satisfy. He is born naked into the world, and in order to live he requires food, clothing and shelter. These can be obtained only as a result of effort. A man may produce any of these articles for his own personal use, and among primitive peoples most of these wants are satisfied directly. If primitive man, or a Robinson Crusoe, wants a shelter, he builds one; if he wants food, he hunts for it.

In our modern complex economic life, however, the satisfaction of our wants is, in most cases, indirect. If food is wanted, work is indeed performed, but very rarely is it the growing or the hunting of food. For whatever work is done, a money wage is received (that is, the work is exchanged for money) and with the money so received the food is bought (that is, the money is exchanged for the food). The simpler the economic life, the more direct is the relation between the effort and the satisfaction of wants. But in all cases the impulse to economic activity comes from the desire to satisfy our wants. We work because we have wants.

Both the terms Work and Wants need clearer definition. Work has been frequently classified as Productive or Unproductive Labour. It was considered that labour was productive when something apparently concrete and tangible was made; for example, when corn was grown or when iron was mined, but that labour was unproductive when no change occurred in the character of the commodity; as, for example, when an article was sold over the counter of a shop.

A closer analysis soon shows, however, how inconsistent

such a classification really is. For were it correct, then the farmers of the prairies of the Far West would be productive labourers, while the sailors who carried the wheat to England would be unproductive; the coal miners round Newcastle would be productive workers, but the merchant who sold the coal to the housewife in London would be unproductive.

Yet, in all these cases, the sailors and the merchant supply a want. The wheat left on the prairies might be comparatively useless; to food-importing England it is an urgent necessity; Newcastle coal satisfies a most intense want in London. It has therefore to be admitted that Commerce and Transport are productive occupations, and that all those engaged in the commercial and transport industries, such as clerks, agents, commercial travellers, book-keepers, etc., are productive workers. They form part of the machinery of production. Without their activities, wants would either not be satisfied or only satisfied with greater difficulty than at present exists. Of course, every employer finds their efforts essential to his business.

The same reasoning can be applied to embrace the activities of judge and doctor, of scientist and of policeman. They all help to satisfy human wants. They are therefore all producers. The doctor satisfies the want for health, the judge satisfies the want for justice, the policeman satisfies the want for order, the scientist ultimately eases the strain of toil and so makes effort less irksome.

There is just a slight difference. The miner satisfies the want for coal or gold or oil; that is, he satisfies a material want, he supplies *commodities*. The doctor or lawyer satisfies a want which may not be so tangible but which nevertheless is just as urgent. They supply *services*.

There is, of course, unproductive labour, but that is simply labour that satisfies no human want. Very few would toil at such tasks. It does, however, happen that labour has been expended on making an article, which when completed is

found to be useless, either because nobody wants it or because of faulty planning. For example, a building is erected and the foundations are found to be defective, or a bridge is constructed which collapses when opened, or a reservoir is built which is found to contain a leak. The labour and the effort in these cases were misdirected; the intention was to satisfy a need, although it failed in this purpose.

Consequently, by itself labour cannot be described either as Productive or Unproductive. All industries, whether Extractive Industries, such as agriculture or mining, or Constructive Industries, such as the iron and clothing industries, or the Commercial Industries, such as the businesses which buy the raw material to sell to the manufacturer, or those which buy from the manufacturer to sell to the final consumer, or the Transport Industries which carry the raw material or the manufactured goods to the place where they are wanted and to the people who want them;—all these industries are Productive industries, for they all satisfy human wants. All those who take part in them are producers. There is one simple test. If labour satisfies a want then it is productive; if it fails to satisfy a want then it is unproductive.

Of course, there are different kinds of labour. The miner generally works harder than the clerk, the skilled engineer does different work from that of the navvy, the research chemist does more responsible work than a typist. Attempts have consequently been made to classify the forms of labour into Mental and Manual, Skilled and Unskilled, Responsible and Automatic. But although there are differences they are rather of degree than of any fundamental kind. One type gradually shades into another and the division is never rigid. Some skill is required to do even the most unskilled task, some mental effort is needed to do even the simplest manual work, some responsibility is assumed even by the most automatic worker. The classification may be useful only if it is remembered that it is not intended to be rigid.

The term *Wants* too has a specialised meaning that needs explanation. Wants have been divided into Necessities, Comforts and Luxuries. Bread, we must have, it is a necessity; coffee is a comfort, we could instead drink water; wine would be a luxury. Producers supply all these wants. Now, at any given moment, it may be possible to divide our wants into this threefold classification, but in the long run, it becomes very difficult. For necessities, comforts and luxuries are only a matter of degree, changing with time, with incomes, with people. The motor car is rapidly passing from the luxury stage to the comfort stage, and to some it has already become a necessity.

Even if the want is not an actual physical necessity it may be a Conventional necessity. People with large incomes regard wines and cigars as a social necessity, the clerk would so regard his black coat, whilst even the navvy, poor though his wage may be, will have his smoke.

In any case, necessities, comforts and luxuries are all wants, and producers attempt to satisfy them all. Of course, every person wants the comforts and the luxuries of life. Wants by themselves, however, have little economic results. A want must not be a whim. The only wants that have any economic consequences are those which are backed by a willingness and by the ability to purchase the commodity or service desired. A poor man may want a holiday, but if he has not the ability to pay for it he has to forgo his want. A millionaire may want to display his wealth on his walls and artists will paint pictures for him, although he may not be able to appreciate them. Producers, then, produce only those commodities and services which satisfy an Effective want.

Wants, too, create wants. The human appetite appears to be insatiable; no sooner is one want satisfied than human nature clamours for another. Candle light satisfied our great-grandfathers, our grandfathers were content with gas, we want electricity. Our fathers were happy with plain lantern slides,

we want "movies" and then "talkies." Our parents were proud of their plain, ordinary trains, we want to fly. It is the skill, the ability and the initiative of producers which encourage and supply these new wants.

If wants are numberless, they are also in a sense competitive. We want to travel—we have the choice of rail or road or car. We are thirsty—we can drink cocoa or coffee or tea. We can go either to the theatre or to the cinema for amusement. We can use gas or candles or electricity. That is, one want can be substituted for another. Wants are therefore competitive or alternative. Even the want for such an urgent necessity as bread can be satisfied by wheat bread or rye bread or potato bread.

In addition, some wants are complementary. There is a want for pen and ink, one is almost useless without the other. The demand generally is for a pipe and tobacco, for shoes and laces, for a table and a chair. These commodities are demanded jointly. Even if one commodity satisfies a want by itself, the satisfaction may be increased when it is used together with the other. Bread is wanted and butter is wanted, but together they give a greater satisfaction still. To those who take sugar, the same would apply to tea and sugar. What is the use of a table cloth without a table or of a car without petrol?

Moreover, although wants are limitless, they are limited in their capacity for satisfaction. For example, one clock in a room yields a certain satisfaction, a second would not yield as much, a third might become a positive worry, a fourth a nuisance. Two sewing machines would not yield double the satisfaction of one. One hour of music would be delightful, a second would be enjoyable, a third would be tolerable, a fourth would be an ordeal (except for a very small section of the community).

This tendency to diminishing satisfaction from wants applies to all wants, whether necessities, comforts or luxuries.

One loaf of bread would give, say, to a starving man, an immense satisfaction, for it would satisfy an urgent want. A second loaf would not give double that satisfaction, a third might actually be wasted, a fourth thrown away. If water were rationed, the first pint would be carefully stored away for drinking, if a second pint were allowed washing might be thought of. A third might perhaps make possible the cooking of food, a fourth and a fifth would be used for less urgent purposes till a point would be reached when water would be wasted.

Lastly, to complete these characteristics of economic wants, producers are never concerned whether wants are good or bad. So long as a commodity or service is wanted, so long will producers try to satisfy the want. Alcohol may be harmful, but so long as people want it, so long will it be produced. Coarse literature may be degrading, but whilst it is wanted, authors will write it, publishers issue it, and booksellers sell it. The question which producers are constantly putting to themselves is: Will it sell? that is, will people want it? and they will set the machinery going to supply the want.

Man is the centre of this economic picture. He has wants, he works to satisfy his wants. He may want all sorts of commodities, good and bad, necessities and luxuries. Producers will do their best to satisfy these wants. Man is both consumer, asking for these wants, and producer, supplying these wants.

The Science of Economics deals, among other problems, with this problem of production and of consumption.

CHAPTER II

PRODUCTION AND ITS ORGANISATION

PRODUCTION, it has been seen, is the process by which goods and services are made available for the satisfaction of wants. The product, therefore, whether a commodity or a service, must obviously then possess some Utility. In its simplest form, then, Production is the creation of Utilities.

The term Utility, however, has a specialised meaning in Economics. It is not so wide as the ordinary meaning of the words, *useful* or *beneficial*. Drink or tobacco may not be useful or beneficial, but as they both satisfy a want, they possess Utility. For wants, it has been seen, may be good or bad, although producers try to satisfy them *all*. Quinine may be very unpleasant to take, but it possesses utility, for it satisfies the want of the sick person seeking health.

All human wants therefore can be said to possess Utility. Very fortunately some wants are obtained freely. Air and sunlight are both necessities of life; they both satisfy a most intense want; but all, rich and poor, idle and industrious, can possess them. Their supply does not entail any economic activity, no economic effort is needed to obtain them. They are economically Free Goods.

Most wants are not earned so easily; effort of some kind is essential. Of course, the effort need not be made by the actual person who wants to enjoy the satisfaction. Most parents make efforts to satisfy the wants of their children, some children make efforts to satisfy the wants of their aged or sick parents. Some persons still enjoy the satisfaction of their wants as a result of efforts made by their ancestors. In all cases, however, effort was necessary for the satisfaction of wants.

Production is the creation of Utilities, but in fact the process of production is not complete until the person who wants the commodity or service actually enjoys it. The miner who digs coal really takes coal from the bowels of the earth, where it can satisfy no want, and brings it to the surface where it does. He supplies therefore a Utility of Place. But so does the shipper who carries the coal from Cardiff to Rouen, as well as the grocer who keeps a stock of goods in anticipation of the wants of his customers.

The coal mined in South Wales may be very useful in summer, but it obviously satisfies a greater utility during the winter months. The coal merchant, then, who stores the coal over the summer to sell during the winter, supplies a utility; a Utility of Time.

The lumbermen of Canada supply a utility; they fell the trees and convert them into cumbersome logs; they supply a Utility of Form. But so does the woodworker who takes these logs and makes of them the tables and chairs for our homes.

Coffee, we are told, is wasted in Brazil; those who convey it, therefore, to our areas create a Utility of Place. There is no difference in the amount of satisfaction obtained from the use of ice, whether the ice is imported or manufactured on the spot. An overcoat has, of course, greater utility during the winter than during the summer. A delicate watch spring has greater utility of form than the rough metal at the mine head.

Utilities of a more personal and individual nature are supplied by the surgeon's skill, the musician's touch, the preacher's voice, the teacher's power of communicating knowledge. Production is the creation of utilities, but it is also well to remember that the Utilities may be Utilities of Form, or of Time or of Place or even Personal Utilities.

An actual case of production might illustrate these terms even better. Let us take the Productive Processes entering into the making of our clothes.

Sheep farmers begin by rearing sheep, they supply a Utility

of Form. The sheep shearer cuts the wool, he, too, supplies a Utility of Form. Through the agency of shippers and bankers the wool is carried to the Wool Merchant; they supply a Utility of Place. The Wool Merchant sells the wool to the Spinners (again Bankers and Transport Agencies are employed). He, too, supplies a utility of Place. The Spinners pass the wool to the Weavers, they supply a Utility of Form. The Weavers now send the Wool to the Cloth Merchants, supplying a Utility of Place, the Cloth Merchants transmit the wool to the Tailors and the Tailors to the final Consumer, the customer who buys a suit of clothes.

Production then is quite obviously a very lengthy process. In addition there was clearly a consumer at every stage of production. The wool merchant is the consumer of the product of the sheep farmer, the spinner of that of the wool merchant, the weaver of that of the spinner, the cloth merchant of that of the weaver, the tailor of that of the cloth merchant. The Final Consumer was the person who bought the suit of clothes from the tailor. The other consumers only represented stages in the process of production. In these stages other commodities were used in addition to the wool. The bales had to be packed—sacks, nails, boxes, coal, machinery and a quantity of other commodities, as well as the services of banker and solicitor, all contributed to the final consumption of the wool.

A distinction is therefore sometimes drawn between that act of consumption which is but a stage in production and the final act of consumption. The sacks, packing cases, nails, etc., used or "consumed" in carrying the wool to be consumed by the merchant or spinner or weaver were used for Productive Consumption. They are Production Goods.

The final suit of clothes, bought in the tailor's shop is used for Unproductive Consumption. The suit having satisfied the direct want of the final consumer is called Consumption Goods.

This does not mean that one type of consumption is superior to the other, but simply that Productive Consumption is not an end in itself but simply a means to the ultimate satisfaction of the Final Consumer.

Producers try to satisfy all the effective wants of Man, but the most cursory survey shows that different people produce different things (that is, they satisfy different wants) that some people have greater skill than others, and that some people are more efficient at the productive effort. It would obviously be to the advantage of every person and of every community to be as productive as possible. Why then are some countries and some people more productive than others? What are the conditions which influence productivity?

In a primitive community, those who are more skilled at fishing obtain a better catch than those who are not so gifted; those who hunt harder obtain more food than the idle. Would the same be true in our complex economic civilisation? The answer to this question involves an analysis of the Factors of Production; that is, of the means which must exist before production can begin at all and the combination of which makes possible the satisfaction of our wants.

The two fundamental requisites are Land and People who work, that is, then, Labour. In the strictest sense nothing else is needed and nothing else exists. Naked, Man came on to the Earth, and his activity has created our industrial civilisation.

It is possible to conceive a naked man wrecked on an islet, and by his activities surviving, and even improving his economic condition. Such a simple and difficult state would, however, be so remote from our present conditions that it could serve for little more than a pleasant exercise of the imagination.

Land is one essential to production—to grow food upon, to build upon. The more fertile, then, the land the greater will be the product. The term Land cannot be confined to the surface of the earth alone, for bound up with the surface are

the minerals beneath and the climatic conditions above, and akin to and connected with the land are its natural forces, its waterfalls, its tides, its wind, and its animal and vegetable life, all of which affect production. Because the term land is given such a wide meaning, some writers prefer to use the term *Natural Resources* or the *Gifts of Nature* to include all these elements; but Land is still the simplest term, and, if it is remembered that it includes all these elements then its importance as a Factor of Production will be duly appreciated.

In the Extractive Industries, land must play the predominant part; in such industries as agriculture, mining and lumbering, the nature of the soil is all-important. It would be more than useless to try to grow wheat in the Sahara or to go lumbering on the prairies or to mine where there was nothing to mine. Compared with the manufacturer the farmer is relatively a passive agent in production. He decides the crop (even that may be decided for him by the nature of the soil), he prepares the ground, he sows the seed and the rest he leaves to Nature.

The manufacturer has a greater choice of activity, for he has greater control over the processes of production. The Extractive Industries do not therefore offer the same scope for initiative and organisation as do the Constructive or even the Transport Industries.

Production, then, will be greater where the land is fertile, where minerals are plentiful, where the natural sources of power are abundant and easy to obtain.

Land, too, has a singular property, for, whereas the supply of people's labour is capable of large increase the supply of land is relatively limited. Some land can be reclaimed from the sea, and in Holland large areas have been so regained, but the proportion to the total land mass is exceedingly small. (The supply of labour can be said to be *elastic*, the supply of land *inelastic*.) Indirectly, however, the productivity of land

can be increased by two human agencies, by science and by transport.

Land which formerly was not worth cultivating has become productive by the application of agricultural chemistry, by scientific fertilisation, by a scientific rotation of crops, by skilful drainage and irrigation. By such methods has a swamp like the Fens become a giant corn-growing area; rustless wheat has made Manitoba a granary in North America. Similarly, the return from land has been increased by the inventions and the improvements in transport, so that areas which had been left uncultivated because they were too remote and the expense of carriage too high have become food-producing centres of the world. The tramp steamer opened up the prairies of North America, the Suez Canal opened up the Eastern areas to the West. But in spite of land reclamation, of science, of transport, it is still true that the available supply is relatively inelastic.

It is the application of effort to land that creates all wealth. The gifts of nature have to be made available to satisfy wants, and it is only by the directing skill of human labour that wealth is created. Now what makes labour productive? Some workers are well-paid and some poorly-paid. People doing the same kind of work but living in different countries earn different rates of pay. Why?

The better the health and the greater the strength of a people, the greater will be their productivity. From this point of view, Health Acts are a good social investment, for they ultimately increase the productivity of the nation. Statistics indicate, for example, that production suffers far more from ill health than from strikes.

The mental qualities of a people have also a profound influence on production. The more intelligent worker or organiser can use his powers to better advantage than can the fool. He generally possesses, in addition, more ambition, finer judgment and greater perseverance. Education Acts, which

seek to train the mind, are like the Health Acts, a sound national investment, apart from any question of their political desirability.

In addition, the productivity of a people is influenced by the conditions of employment. If the work-places are well ventilated, well lit and kept at a healthy temperature and situated amidst surroundings which are cheerful, the effect on output is pronounced. The study of Industrial Psychology has shown the industrial value of comfortable seating, of proper work-pauses, and of a happy working atmosphere on the efficiency of the worker and on his productive capacity.

Economic conditions, too, react sharply on the output of people. If the hours of labour are excessive the product ultimately declines. Even a relatively short day may mean excessive toil; for example, in comparing the ten-hour day of a hand worker with the eight-hour day of a machine worker, it is well to remember that in the latter case the machine sets the pace and the leisurely effort of the craftsman is replaced by the monotonous work of the machine minder. During the war it was found that the output of munition workers actually increased when hours were reduced.

Lastly, the efficiency of the labouring population is intertwined with the wage that they receive. It is a kind of circle. High efficiency leads to high wages, high wages lead to high efficiency. The greater a man's service to production, the higher is his wage and the more is he able to consume, and conversely, the higher a man's standard of living the more capable is he of rendering efficient service.

As between individual workers, their efficiency depends (granted that they are of equal strength and intelligence and of the same earning capacity) upon the manner in which their earnings are spent. In one case the wage may be used carefully and methodically, in another it may be wasted or spent harmfully. The manner of the spending will ultimately react on efficiency, and, consequently, on output.

The Land and its People are the two essential factors in production, but the term People or Total Population is not by any means identical with the number of actual workers. Some of the Population may not be able to work because they are either too young or too old. A population which included a large proportion of young or of old (granted that other factors were equal) would not be so productive as one in which the *working* population was more numerous. It has been remarked that new countries to which emigration is considerable, benefit from the fact that the unproductive age of the immigrants has been spent elsewhere. It might be sound policy, economically, to kill off unwanted children and useless old folk, and among some peoples this has actually been done, but the number of sound workers would ultimately fall, for no children would replace them and the productivity of workers might decline if they lacked the advice and the stimulus of the old. In any case, the economic motive is not the ruling motive in our civilisation and motives of humanity would check such a reckless search for economic efficiency.

Even if two communities were identical in the age-composition of their people and in their working population, one community might be more productive than the other because its people were more intelligent, stronger, healthier and more happy in their work. Mere numbers give no true indication of the productivity of a people. Population and Labour Supply are rarely identical.

In modern civilisations there are, in addition, many who might be highly efficient workers but who have no need to work to satisfy their wants, for they possess property which they can lend and they receive in return part of the wealth to the creation of which their loan has contributed. If, for example, they own land, and land we have seen is essential to production, they can lend their land to those who need it and receive in return part of the produce of that land or a money payment with which they can satisfy their wants. The productivity of

a community would be obviously increased if those who have no need to work did in fact work.

Fundamentally, then, all our wants can be satisfied by the application of human effort to the bounties of nature. But the product would indeed be meagre. Man could gather fruit from the trees, he could scratch the earth with his fingers, he could fight a life and death struggle with wild animals. But life under these conditions would be "nasty, brutish, and short." From the first, then, Man learns the value of saving seed, of using a stick to till the earth, of acquiring weapons to hunt animals. So emerges the world's Capital, which in combination with Land and Labour eases human toil and increases production a thousandfold.

In its widest sense, then, Capital includes all the improvements which Man has made, from the invention of fire and the wheel, to the world's buildings, its machines, its railways, its dockyards, its roads, its harbours, its bridges. If wealth consists of those commodities and services which satisfy wants, *Capital is that part of wealth which is used for further production.* In the last hundred years, the increase of Capital, especially in Western Europe and America, has been so enormous that an immensely larger population has been kept in comparative comfort. We say that the Standard of Life has risen; food is better, homes more comfortable, amusements more varied; in a word our wants have increased and with the aid of Capital they have been satisfied.

By itself, a machine is worthless. What gives it value is the knowledge of how to use it. Without the knowledge of steam our railway engines are useless. Without the knowledge of navigation, our sea-borne commerce would cease, although the ships might be grander than ever. Knowledge too, then, is part of the world's Capital. It accumulates steadily, each generation, in a sense, starting where the previous generation left off. "We stand on the shoulders," so to speak, "of our fathers and see further."

If a malignant disease attacked Mankind, the chief symptoms of which were that Man forgot his knowledge, then in a very little time, in spite of our dockyards, wharves, harbours, trains, machines, he would be reduced to grubbing the soil for food, and would die of starvation and exposure.

If a machine, then, can be regarded as Material Capital, then the knowledge of how to use the machine, which is equally important, is Non-Material Capital. It includes the doctor's learning, the scientist's scholarship, the engineer's craft. By its provision of schools the nation sees to it that this learning is not forgotten and that this Social Heritage should be passed on to enrich the future.

Not all knowledge is of economic value. Some knowledge may have no utilitarian value at all. Of what use economically would be the knowledge that, say, Bacon wrote the "works of Shakespeare," if that were proved, or that the Gunpowder Plot was never plotted? Some knowledge may even render previous knowledge out of date. The knowledge of steam navigation has replaced the old sea lore of the sailing craft. Some knowledge may even be destructive of production, for explosives and poison gas can destroy human beings and their accumulated capital at a rate that impoverishes the world. On the whole, however, knowledge is creative and productive. Capital consists then of all the accumulated resources of Man which are used for further production.

Capital therefore plays a double part. It is itself a part of Wealth and the result of productive effort. It is also a Factor in Production, and is so required for further productive effort.

In some ways, Capital resembles Land. Capital and Land are both "worked on" by Labour—they are inactive factors of production. It is the active and directing forces of Labour, working on Land and Capital, which create wealth. In modern communities both—Land and Capital—are privately owned, so that their owners receive rewards for loaning this private property to those who need it for pro-

ductive purposes. It is this which gives them a claim on the productive resources of society. In addition, both Land and Capital can be separated from their owners, whereas Labour of course cannot be separated from the labourer. But Land and Capital also differ. Land is a natural factor; it is already there, whereas Capital has to be created, it is a product of Labour. Land too is relatively limited in supply, Capital can be enormously increased. Land, as a gift of nature, is indestructible, capital is constantly being consumed and must as constantly be replaced.

The Capital of a company, or of any business, is generally expressed in terms of money, but quite obviously it is not in the form of money. The capital of the business really consists of the buildings, the plant, the machinery, the patent rights, the store of raw material, the goodwill, the stock of finished goods waiting to be sold, and a certain amount of cash for current expenses. For the sake of clarity these have been divided into Fixed and Circulating Capital.

Capital which is capable of giving repeated service is called Fixed—such as the buildings, the plant, the patent rights, the goodwill. Capital which can give service only once, such as the raw material, the finished goods and the money, is called Circulating Capital.

Money which to the individual business is Circulating Capital, because it is used only once, when making purchases, is however to Society, Fixed Capital. For like a machine it wears out slowly, the same coin can be used again and again and it behaves like a machine which facilitates exchange and therefore helps in production.

Land, Labour and Capital are the three requisites of production. Their skilful combination makes possible the satisfaction of our wants; they form the bases of Economic Society.

CHAPTER III

SPECIALISATION OR THE DIVISION OF LABOUR

PERHAPS the most astonishing feature of modern economic society is that thousands of people spend their working lives producing things which they do not want, and cannot use, and that each person trusts that there are others producing those things which he himself wants. The astonishment becomes greater when it is seen that in this apparently unco-ordinated productive machine there is no chaos, but some sort of order.

Of course, such industrial conditions have not always existed. Once upon a time Man may have satisfied his wants by his own efforts. His life then must have been precarious, and his chance of any leisure or refinement remote.

Families may have tried to provide for themselves the food, the shelter, the clothing they needed, but their wants must have been limited and meagre. In our modern civilisation, no Man, no one Family, can produce for itself all its needs. For even in a large Group, if every member worked as hard as he could, there might not be any one among them with the necessary ability, or the region in which the Group lived might not contain all the things they needed.

The outstanding feature, therefore, of our Industrial Civilisation is the Division of Labour. All labour, every task, is divided and sub-divided until each workman becomes a Specialist, doing only a fraction of the whole. Yet, what from the point of view of the individual is Specialisation, is from the point of view of Society, Co-operation. Each specialist does his share, which dovetails into the whole. For the work each does is not haphazard, and the small share each per-

forms fits into a planned scheme. The closer the specialisation, the greater must be the co-operation amongst the specialists, so that any shock to a part ultimately reacts on the whole world.

The classic statement on this development in industry is that given by Adam Smith. He was so impressed with the importance of the Division of Labour that he devoted to it the first three chapters of his famous book, "The Wealth of Nations." He begins "The greatest improvements in the productive powers of labour, and the greater part of the skill, dexterity, and judgment with which it is applied seem to have been the effects of the division of labour." He took as an example the making of a pin in a factory employing ten men. He showed that if each man tried to make an entire pin by himself he might make one pin by the end of the day, but that by the application of division of labour, one man drawing out the wire, another cutting it, a third pointing it, and so on, 48,000 pins were produced in a day.

Even amongst the most primitive of men the economy of specialisation must have been noted and work divided according to age and sex. Children could not do the work of adults, or women that of men, the old could not do the work of those in the prime of life, or the feeble that of the robust. Manual dexterity and mental dexterity must have been recognised and tasks allotted accordingly.

According to John Stuart Mill, there are two forms of this co-operation, or division of labour. Simple Co-operation is achieved when several people combine together to perform a task which is beyond the strength of any worker singly, as when many join to lift a weight which is too heavy for one. And Complex Co-operation takes place when a task is divided into different parts, and a part is assigned to different persons, when, for example, one set of men rear cattle, another tan leather and still another make the boots, or in the production of a newspaper, one group make the paper, another print

another write it and still another group sell it. It is this Complex Co-operation which is generally known as Division of Labour. Its development has resulted in the vast increase of the world's productivity.

The evolution of industry began with the separation of those crafts which obtained the raw materials from those which made up the raw materials, or in economic terms with the separation of the Extractive and the Constructive Industries. Even before industries were separated there existed a separation of Functions, between the ruler and the priest, the warrior and the worker. Development began when people specialised in different industries. For gradually the Transport Industry developed as a specialised craft, then the Merchandising Industry, then the Banking Industry.

The next stage took place when division began within the industries. For example, within the Extractive Industries, some rear cattle, some grow corn, some mine iron, some mine coal, and later some grow cotton, and some grow fruit. In the Constructive Industries, some make clothes, others make houses. In the Transport Industries, some sail ships, others drive trains.

Gradually further division takes place; there is sub-division within the industries. In the clothing industry for instance there is sub-division into wool, silk, cotton and linen industries. Then there takes place further sub-division within each of these, in the wool industry for example into worsted, tweed, serge and shoddy industries. The processes within each of these crafts are further subdivided and these again subdivided until ultimately each worker does nothing else but one very minute operation. Each man has become a specialist and it is by the co-operation of these specialists that production now takes place.

Specialisation has now entered into every sphere of human activity. In the medical craft there are throat specialists, eye specialists, ear, skin, heart and lung specialists. In the realm of

athletics there are footballers, cricketers, swimmers, runners, and even within these there is further specialisation; in football for example into forward or back. All-round sportsmen are becoming rare. In the teaching profession there are history, geography, mathematics, literature and other specialists.

It would be difficult to find any industrial realm into which this division of labour has not entered, and the tendency is for tasks to become more minute, and for specialisation to become even closer. A story is told that in a large motor-car factory a man was dismissed because he sneezed and dropped his spanner, as a result of which five motor cars emerged without an essential bolt. This ever-increasing specialisation is the basis of mass-production, of scientific management, of rationalisation and the other refinements of the increasing division of labour.

What are the advantages of this Division of Labour? What are its disadvantages? How far can it be carried? Are there any limits?

Its economies and its frictions can be regarded from the point of view of Society as a whole and from the point of view of the individual worker.

From the standpoint of Society the greatest advantage of division of labour is increased production. Ten persons on an island each trying to live in splendid isolation, that is each trying to supply all his needs by himself, would not produce very much; some might die from inability to meet the struggle for existence. The same persons, co-operating by means of a well-organised scheme of division of labour, might even find time for leisure and, perhaps, for the cultivation of some of the amenities of civilised life, and with less toil.

In modern life, it would be actually impossible for any man to make anything completely by himself. If he tried to make a pair of boots, could he rear the cattle, tan the leather, make the nails to hold them together, and so on? By division of labour

the effective demand for boots is met. The increased output is not the result of greater individual effort, for people actually work less hard; it is due simply to the more effective organisation. Increased production, unless the demand increases still faster, is usually followed by cheaper goods, and the world as a whole gains by an increased volume of goods and services at a cheaper cost per unit.

Secondly, division of labour acts as a stimulus to invention, and leads to the introduction of machinery. The tiny task performed by each specialist becomes so mechanical that it is easy for a machine to take it over. Most mechanical improvements have been made by specialists who can contrive a piece of mechanism to do the work which is already automatic and mechanical. Machinery, of course, helps to increase production still further and in addition it eases the strain of human toil and effort. A machine-less world would be a far poorer world, and a far more toilful world.

Thirdly, division of labour saves time, quite apart from the increased output per head. It saves changing from one set of tools to another, it permits concentration on one task, it allows the skilled to do skilled work and not to waste their energies by doing less skilled work. Society as a whole benefits from the fact, for example, that the doctor can keep to his craft and that he has no need to do, say, plumbing. Every improvement which eliminates waste is an asset to society.

Fourthly, division of labour economises tools; it makes possible the full use of the most expensive machinery, which, but for the fact that it was fully used, it would not have been worth while to introduce. It permits a more economical use of ordinary tools. In a tailor's shop for example, unless there existed some specialisation, the sewing machine would be idle while the scissors were being used, and they would both be idle while the press-iron was being used. By division of labour they are all used, and fullest advantage is taken of the help which tools and machinery give.

Fifthly, division of labour facilitates saving. Saving might, of course, go on even if a community tried to be self-sufficient, and each family tried to do all its own work, but the saving would not be large. In a community based on the division of labour, some can make the tools and equipment which will increase production later, whilst others can support them in the meantime. It permits some to specialise in the production of "future" goods whilst others supply them with goods for their daily needs.

Sixthly, division of labour among people makes possible division of labour among areas. Just as some people are better fitted to perform particular tasks than others, so some areas are better fitted than others to grow particular foods, or to manufacture particular commodities. Lancashire has an advantage in her moist climate for cotton spinning, South Africa has the advantage of her diamond mines, the Prairie lands of the U.S.A. for wheat. As long as industry needs coal-power, so long will the coal centres of the world have an advantage for the manufacture of goods. This results in the Localisation of industries in the areas best suited for them, or in the Territorial Division of Labour. It is obviously of great benefit to Society that it should make the best use of the various qualities possessed by the different parts of the earth.

Lastly, division of labour facilitates the accumulation of a great fund of knowledge which is transmitted from generation to generation. Most people who work for any time at a task acquire a store of facts about their work. These need not be trade secrets, but a doctor in practice, for example, will learn, in addition to the knowledge he has acquired by training, a great deal of valuable information which he can then pass on. A newcomer to a craft never begins where his father did. He starts with the accumulated knowledge of the past. Formerly apprenticeship served this purpose; the newcomer watched the craftsman and tried to acquire his skill as well as his experience. Since apprenticeship is disappearing, for a machine

may render useless the acquired skill of even the most skilled craftsman, and because those who are skilled workmen are not always the best in imparting knowledge, new specialists have appeared. Books, Trade Schools and Technical teachers specialise in transmitting knowledge, in arranging it in a methodical manner and in imparting it to juvenile minds at the threshold of life.

Because this new knowledge is so advantageous, the work of acquiring it has itself become specialised, so that in most industries there are specialised research workers whose task it is to seek fresh knowledge. The world as a whole gains enormously from an increase of this Non-Material Capital.

To the individual worker, too, division of labour offers many advantages. First, he gains in skill. "Jack of all trades is master of none." By constantly doing the same task, he learns to economise his energy, he learns the best way to use his strength and his tools. Practice makes him perfect and his greater output enables him to secure a better return.

Secondly, he gains in leisure. As productivity is increased, he need not spend so long at his task. The progressive shortening of the working day has been very marked in the last century.

Thirdly, the strain of toil is lessened, for the task by constant repetition becomes a routine. He does not feel so tired as he would feel had he to meet a new set of operations every day. He is also helped by the fact that the heavier tasks are now performed by machinery, so that the whole tension of life is eased. Can one now imagine the effort of building the pyramids or that of human power in an ancient galley?

Fourthly, division of labour gives Man an opportunity of choosing the task for which he is best fitted. There are, of course, a great many square pegs in round holes in our industries, and entry into crafts is still haphazard. But given careful planning it is now easier for people to enter the trade or calling for which they are best adapted. A great deal of our

labour unrest is often psychological and is due to the fact that men are performing tasks they dislike.

Lastly, every man as a worker is a producer, but he is also a consumer, and he gains by the cheapening of goods which is the most obvious result of the division of labour.

Offset against these many advantages are also many disadvantages, both to Society and to the Individual. On the whole the advantages of division of labour apply most to Large Scale Production and consequently the goods produced are all to a standardised pattern. The individuality of our lives and of our homes seems to have departed when we live in standardised houses, sit in standardised chairs, ride in standardised cars, enjoy standardised amusements. Society may suffer from the lack of individuality and the standardisation of most of our wants.

Secondly, Man is not a worker only. He is also a citizen, who is called upon to pass judgment on all the complex problems arising from the relationship between human beings, on foreign affairs, on peace and war, on domestic problems. Close specialisation on a monotonous task does little to develop his reason, or his intelligence, or his capacity for judgment, for in the factory, direction and reasoning are performed by another set of specialists. A factory is an autocracy; modern government is democratic. It is possible that close division of labour may injure qualities necessary for citizenship.

The Individual suffers perhaps more than Society from close specialisation.

First, the most obvious characteristic of modern industry is its monotony. The repetition of the same simple task for days and weeks at a stretch deadens intelligence. The removal of any sense of responsibility and of any creative feeling cramps the horizon, and reduces Man to a mere automaton. Much of the malaise of working-class life, the craving for excitement, is due to this monotonous toil. It provokes a new type of industrial fatigue which deadens initiative and incites

a desire for passive amusements and vulgar excitement as a reaction from the utter dullness of work.

It is sometimes argued, however, that this criticism has been over-emphasised. The life of the mediæval craftsman is contrasted with that of the modern "slave of the machine." The craftsman who made the complete article, according to his own design, in his own time, with pride and joy in his work, was an artist; his very work was an education. The past, however, it is contended, has too often been romanticised. Specialisation was already well advanced in the Middle Ages, otherwise the craftsman could not have spent all his time making just one article. There were already cloth workers, fletchers, masons and shipwrights. If, therefore, it is the *degree* of specialisation which is criticised, then it can be argued that the price which the mediæval craftsman paid for not being so specialised was in longer hours of work, and less varied satisfaction of wants.

And, against the monotony of toil, which is the lot of workmen to-day, it is argued that criticism should be really directed against monotony of life, and not against the monotony of the working hours. Mediæval life as a whole was probably more monotonous. Modern life is, beyond doubt, infinitely richer in opportunities for the use of leisure.

Specialisation has the further disadvantage that it fits the worker into the small task he is performing, so that he is at the mercy of every industrial change. A new invention renders him workless, and his specialised skill may be useless elsewhere. As a rule, the closer the specialisation, the greater risk there is of having the specialised skill rendered useless by a machine; this makes unemployment inevitable and difficult to remedy.

In answer to this criticism, however, it has been argued that the machine is not the cause of unemployment, and that close division of labour, by simplifying tasks, makes the operations of one industry not very dissimilar from those of another, so

that mobility of labour is promoted rather than hindered.

Still another criticism is that division of labour is usually associated with large scale industry. In most cases these industries are owned by Limited Liability Companies. The ownership, then, is divided among the thousands of shareholders scattered over the globe. Not only is ownership anonymous and therefore irresponsible, but the very structure of such industry, dehumanises industry. The fellowship between master and man is gone, rigid rules and red-tape replace personal and social relationships. In reply to this criticism it is contended that on the whole the larger the firm the better are the conditions that can be given, the better is the pay, the more secure is the tenure of employment and that it is the personal supervision of the master which is most disliked (this accounts, for example, for the unpopularity of domestic service).

In spite of all arguments for or against, it is impossible to go back. Division of labour has come to stay. By law, Society can mitigate the harshness of intense specialisation. Its advantages, economically, are so overwhelming, that further extension is to be expected.

Are there any limits to this division of labour? There are; but the question involves a discussion on the Organisation of Industry.

CHAPTER IV

THE ORGANISATION OF INDUSTRY

THE key to our Economic Society is Specialisation. Every firm is specialised, every machine is specialised, every worker is specialised, even areas are specialised. How do they co-operate?

Every specialised firm, with its specialised machinery and its specialised workfolk, is a productive organism controlled and organised by its owner. He it is who will combine the requisite proportions of land, labour and capital to produce those commodities which he hopes will satisfy effective wants. Because production is lengthy and specialised, he will never know how much to produce—he may not even know whether what he is producing will ever sell. In other words, he produces long ahead of demand and in anticipation of demand. (Of course, he will try to stimulate demand by every device of skilful salesmanship and advertisement.)

There is rarely certainty in business, and, although the business man may insure against fire and fraud, he cannot insure against his own miscalculations or his own poor organisation.

There are, therefore, two additional factors of production which modern industry has entailed; Risk and Organisation.

Every business man is a risk taker. The risk will vary according to the industry, but, on the whole, there are four possible risks facing most concerns, some with greater intensity than others.

First, the owner may miscalculate the effective demand, and overproduce or underproduce. Secondly, he may find that a substitute has been put on the market which seriously affects

his output and his sales. Thirdly, weather conditions may seriously affect the supply of his raw material (as when drought destroys the sheep in Australia, or a pest attacks the cotton plant of America), or the demand for the finished goods (a wet summer may seriously affect the demand for flannels). Fourthly, if the business man launches a new industry he never knows whether the product will take. The "talkies" have taken, but roller-skating was a failure. Even if the new invention proves a success, then an older industry is adversely affected—the talking-picture has injured the silent film and reduced many companies to bankruptcy, road transport is seriously affecting the railway, while the wireless may affect the demand for other types of amusement.

Industry therefore needs a class of risk takers, and society pays them, of course, for the risk they take. If they risk successfully, then their rewards are large; if they fail they go bankrupt.

Every business man is also an organiser. He has to balance carefully the amount of land, labour, and capital to buy and use in order to obtain the maximum return. Now some business men are, of course, good organisers and some bad. Economic society, which fosters competition amongst these business men, hopes thereby to eliminate the bad organisers and the failures at risk-taking. Whether competition successfully performs this function is another matter.

No man, however, whatever risks he may want to take to meet an unexpressed demand, or whatever his ability as an organiser, can start a business without capital. It is in this sense that our Economic Society is a Capitalist Society.

As is to be expected in a Competitive World, there are a variety of industrial organisations.

The oldest and simplest is the One Man Business. The small shopkeeper, the village carpenter, the small farmer, all provide their own capital, do their own work, market their own produce and live on their own profits. Many have confidently

foretold the decline of the One Man Business in face of the competition of the large firm. But in spite of amalgamations and trusts, the One Man Businesses more than hold their own. Evidently they possess various economies which give them advantages over the Large Firm.

The greatest advantage of the small manufacturer, or merchant, or shopkeeper or farmer, is the personal interest and supervision of the owner. The larger the undertaking, the more impossible is it to maintain this personal control and supervision. The self-interest of the owner provides the best check on waste and inefficiency. He is not bound by routine or red-tape; he can risk everything on a lucky opening.

When risk-taking is of special importance, for example, with pioneers in a new industry, the small firm has a further advantage. The large firm may have its capital bound up in costly machinery, its directors may disagree on the new proposal, its salaried staff may have no interest in new ventures. The one-man-firm acts as a skirmisher in the industrial field. Wherever a new demand is foreseen, whenever a new taste is expressed, there the one-man-firm, with its flexibility and its enterprise, will rise to meet it.

In the small firm, too, the personal contact with the customer is more prominent. The owner may have acquired a reputation for honesty, for good service, for giving good quality; which are valuable assets. He is known, his customers have faith in him. His good-will then gives him a special advantage. He may know the locality better than is possible for a large concern dealing *en masse* with its customers. He meets just the local wants, for he knows his customers and their special likes and dislikes. It would not pay a large firm to cater for what, in comparison with their large output, is but a small demand.

Large firms secure their superiority by standardising their output. Whenever the standard article is not wanted, whenever something individual, a suit of clothes, a piece of furni-

ture, a special fabric, is required, there the small firm will flourish. Hand-made goods are invariably the product of the small firm.

Similarly articles of fashion, which change rapidly, or articles whose demand is liable to rapid fluctuations, can be supplied with greater ease and economy by the small firm than by the large business.

The growth of large firms has been helped considerably by the fact that they have concentrated round the great power centres of the world. During the industrial revolution of the eighteenth century, industry travelled north to take advantage, first of the water-power, and then of the coal-power. With the growth and the expansion of electricity, which unlike coal is a diffusing force in industry, industry is already beginning to travel back south and is deserting the town for the countryside. The one-man-business is reaping the advantage of the development of this new power, for it is the most flexible form of industry. Wherever the owner sees a demand, there he sees a profit, and there he finds a niche.

The one-man-business may grow—it often does; the small firm may become but a unit in a large one; it may combine with rivals to form combinations and trusts; but as demand is constantly changing, so industry will attempt to satisfy it, and so there will always be scope for the small man. The trust and the combine will never entirely eliminate him.

Logically, the next type of business unit is the Partnership. The owner of the one-man-business may suffer from lack of capital; he takes a partner who supplies the deficiency, or, he may have sufficient capital, but takes as a partner his gifted business manager. As a Partnership the unit of industry is still small enough to reap the benefits of the flexibility and the pioneering skill of the small one-man-business. In addition the partners can begin to specialise. One can do the internal organising, the other can buy the raw material, or market the product. The partnership has the additional advantage of

giving the brilliant business man with capacity and no capital his chance. Nevertheless the business now has two chiefs who may disagree so that the business may suffer.

The One-Man-Business and the Partnership were the normal units of industry in the seventeenth, eighteenth and early nineteenth centuries. The dominant type of industry in the nineteenth century, however, was the Joint Stock Company, which since the Limited Liability Act of 1862 has grown enormously. This Act gave the shareholders this inestimable advantage, that on the failure of the business they were liable only up to the nominal value of their shares.

The Joint Stock Company is a combination of capitalists, large and small, who combine to supply the capital necessary for any business. They are called the shareholders. They appoint Directors to control the business. The Directors in turn appoint the Managers and the Staff, recruit the labour and generally organise the business.

Its growth has been phenomenal; for its advantages are overwhelming. It has special claims as an industrial unit, and it makes a special appeal to the individual capitalist.

To the individual it provides a good opening for his savings and the hope of large rewards encourages him to invest, that is, to combine with others to control the business which is being floated. By the gift of the Limited Liability Act he risks only his shares in the company if the company fails. He is able in addition to spread his savings (his investments) over many industries by taking up shares in several companies, and so further minimise his risk of loss. If by chance he needs ready money he can sell his shares at their market-value.

To the company, it offers a means of mobilising the capital of hundreds of small investors—it has in fact an almost unlimited capital at its command. Great undertakings need large capital, our railways, our dockyards could hardly have been built by the one man business.

The very size and publicity of the company acts as an

advertisement, giving people confidence to invest, and making known its product.

It gives an opportunity to the best business brains to act as managers, if they have not the capital to start a business for themselves—not that family influence and judicious jobbery are always absent, but the company does offer an opportunity to merit which otherwise might be lacking.

Unlike the small firm, the Company does not depend on the founder for its success. In the case of the One-Man-Business, the successful father may have a most unbusinesslike son, with disastrous results to the business. In the case of a Joint Stock Company, new directors can be elected to fill any gap. The longevity of the Joint Stock Company gives it, then, a further advantage.

In the case of a Partnership, if one partner withdraws the business is often injured. In the case of a Company, if a shareholder decides to withdraw, he simply sells his shares. The capital of the Company remains unaffected.

Lastly, the Company can take advantage of all the economies of large scale industry. It can buy in bulk, it can sell wholesale, it can afford the most expensive machinery, that is, expensive in initial outlay but ultimately of greater economy. For example an oil company can put down a line of pipes from the oil-wells to the distributing centres which once installed saves the enormous expense of continual transport. It can apply the most extensive use of the economies of the division of labour. By buying and producing and selling in such enormous quantities, it can secure better terms from every type of agency for ocean, rail, road, or air transport. It can secure the best legal advice in case of difficulties. It can afford to pay the most capable specialists in engineering, in planning, in buying, in selling, in a way no small man can ever do. Its economic strength appears unassailable.

The worker too enjoys considerable benefit. On an average, the large firm can pay him better wages than the small strug-

gling firm, it can afford to experiment with various forms of welfare work in order to secure loyal service, it can provide playing fields, medical service, music during the lunch hour, tea in the afternoon, pensions on retirement. The worker, too, is more secure in his job when working for a large firm than when working for a small firm which is more liable to collapse. The large firm offers him opportunity for promotion, it permits him to specialise, for he is sure that his specialised skill will be wanted. The large firm even provides an opportunity, by grouping together large numbers of workers, for the combination of working folk in Trade Unions, to maintain standards of life and of conditions.

Lastly, a large company is better able to offer resistance to trade depressions; it is able to survive through any great economic disaster which would sweep away the smaller firm.

How does the Limited Liability Company with its large-scale organisation affect Society? It gives to Society the benefits of division of labour, but it also raises some peculiar problems. In the first place, the Joint Stock Company creates a distinction between the risk-takers and the organisers of a business, between Capital Control and Capital Ownership. The owners of the company are its shareholders, but they in no way organise the business. They leave that to directors and managers, who are paid fixed salaries for their services, and who can never have the same personal interest in the company that the owners have. Some companies have tried by a system of bonus payments on profits to give their managers and organisers a greater personal interest in the firm, but it cannot be as real as when ownership and control are in the same hands.

This type of industrial unit has also been criticised for creating a new social problem, that of Absentee Capitalism. For in most cases, the shareholders take no interest in and have little knowledge of the technique of the company which they own; they are only concerned with the distribution of profits. In

many cases, shareholders live far from the company, for shares can be bought and sold beyond the boundaries of any state, so that Englishmen hold shares in Latin American railways, and Americans hold shares in English companies. In many cases, therefore, they cannot take any active concern in conditions of employment; in fact they do condone, in some cases, uncivilised conditions. The ownership is distributed among so many individuals scattered over the globe that industry has become dehumanised, for the owners are anonymous. The one common interest among them all is the profit of the company, which together they own, so that improvement may be checked in the desire to increase it.

It has also been suggested that such large concerns may even act harmfully to industry as a whole. Their buildings, their machinery, their equipment are so expensive that they dare not risk loss or failure. If therefore a new invention or process or patent is put on the market which will jeopardise their earnings, it will pay them to buy it up and not use it. Society obviously suffers from such action. It is said that railway companies, fearing the competition of canals, bought up canal shares and then left their competitors derelict.

Lastly, the buying and selling of Stocks and Shares create a class of fortune-hunters, who do not regard their investments as a contribution to production but who buy shares in order to sell at a profit. They may give the impression that the shares are going to rise, or they may manipulate the market in the hope that they will rise, but their profits represent no reward from production; they are a payment from society for no service rendered.

The Company issues its capital in shares. The name of the share matters little. If the nominal capital of the company is £1000 in £1 shares, then each £1 shareholder has a claim to one thousandth part of the profits which are divided.

If the profits are large, then the claim will be large and people will be willing to pay more than £1 for the share. If

the profits are small, then the value of the £1 share drops in proportion.

Ordinary shareholders are the owners of the company. They take the risk of losing their invested money. They, in law, appoint the Directors and decide the main outlines of policy.

There are also Debenture Shares. These are the loans to the company at a fixed rate of interest. The owners of these shares (which can be bought and sold like ordinary shares) are creditors of the company; they have the first claim on the company for the payment of their fixed interest and they can sell up the company to get it. They have no voice in the government, or in the management of the business. These Debenture Shares are generally safer than Ordinary Shares, but then if profits are high, they reap no additional returns.

There are also Preference Shares, standing between Ordinary and Debenture Shares, with further refinements of Cumulative and Non-Cumulative Preference Shares, the Cumulative Preference Shareholders being assured that their dividends will be made up in good years, if they receive no returns in bad years. There are also Deferred Shares.

The Limited Liability structure has made possible two further developments in industrial organisation. A Private Firm, in need of money but still wishing to retain control of the business, can transform the business into a Limited Liability Company and issue Debenture Shares the holders of which will have no control or voice in the business. The Firm has simply borrowed money from the public.

Secondly, because the control of the company is in the hands of a majority of shareholders, each share and not each shareholder having one vote, it is often easy for a group of financiers to buy up 51 per cent. of the ordinary shares of a company and so control its policy. They can do this in several companies so that a Holding Company is formed. Industrial control is still under the sway of money, and this of course facilitates combinations and trusts in industry.

It also happens that when a company makes large profits—instead of issuing all the profits; though sometimes they do distribute all in addition—they issue Bonus Shares to the shareholders. These shares rank for dividends just as ordinary shares. For example, a company with a nominal capital of £1000 makes large profits. It issues to its shareholders one Bonus Share for every ordinary share held. Automatically the nominal capital of the company is doubled to £2000. Even if profits are as large again the following year, *nominally* each shareholder only receives half. If, for example, 10 per cent. were distributed when the nominal capital was £1000, only 5 per cent. will be distributed when the nominal capital has been increased to £2000, although the true profits of the company are just as high. This is called Watering the Capital.

There is a further type of industrial organisation which has shown extraordinary power of growth; that is the Consumers' Co-operative Society. This is a Society of Consumers, who co-operate to buy commodities wholesale and sell retail. Profits are then distributed to the members in proportion to their *purchases*. Its wonderful growth is due to the fact that it secures all the advantages of large scale organisation, and, in addition, the stupendous benefits of a sure and stable market. For the consumers are the society and their economic loyalty is assured by the dividend on their purchases.

Groups of idealists have attempted to launch a Producers' Co-operative Society, that is a Society where the producers were also the owners or shareholders and where profits were to be distributed among the producers or workers. In England, this type of co-operative society has shown no record of development. This was the ideal of Robert Owen and of the Christian Socialists, but idealism and realism in business have still to be worked out. The friction of industrial discipline has not yet permitted the managers and foremen to be both servants of the shareholders and masters of workingmen when shareholders and workingmen are the same persons.

Public Authorities have also entered into the realms of commerce, and the State and the Municipalities have grudgingly, but surely, taken over economic activities. Some people regret that governments should depart from their primary functions of maintaining law and justice to enter so material a field as business. Generally the industry they control is of a monopolistic nature.

How is it that economic society which fosters competition permits also Monopolies and Trusts and Combines?

CHAPTER V

COMPETITION AND COMBINATION

A FUNDAMENTAL feature of our Economic Society is personal economic freedom. With very few exceptions, any person may enter any craft, and any person may start any business. It is this economic freedom which has made production so smoothly and rapidly responsive to demand, and which is the chief source of the flexibility and the elasticity of productive organisations. Its full value can be appreciated after previous conditions of restriction and restraint, when only certain classes could enter particular trades or follow particular callings. Of course, while any person *may* start a business; that is, try to satisfy the wants of people, it does not mean that any person *can*. The restriction is no longer legal, it may be the result of lack of means.

Society relies on this economic freedom to satisfy its wants. Because it implies that anybody can attempt to satisfy society's wants, it supposes competition.

From the point of view of the individual owner, one business competes with another to sell its products, and the consumer, of course, benefits from this competition, by obtaining his commodities and services cheaper. In the struggle some owners succumb; others, in order to survive, have to buy their land, labour, and capital more economically and combine them in the most advantageous proportion. In other words, Competition would presume efficiency and economy on the part of the producer and cheap goods to the consumer.

From the point of view of Society, these businesses compete, therefore, *to serve*, to give the consumer a better article at the same price, or the same article at a cheaper price. For this

reason society fosters competition.

But our modern Competitive Society is not entirely one in which producers alone compete with each other. Competition has wider ramifications. Producers compete to sell their products, but so do Consumers compete to buy. If, for any reason, there is a dearth, either natural or artificial, then the competition among buyers becomes the more powerful and so the more obvious. It is, however, generally true that competition amongst sellers is more pronounced than competition among buyers.

Producers compete to sell their goods, but they also compete as buyers, to buy the necessary agents of production at the most advantageous terms. The agents of production, too, compete with each other for employment; for the producer has to decide on the proportion of land, labour and capital to buy. He can employ more men and less machinery, or he can arrange for a more compact building, or employ a special method of transport.

Again, articles of alternative demand compete with each other. Shall we drink tea or coffee or cocoa? Then the tea, coffee and cocoa industries compete with each other. Shall we wear wool or cotton or linen? Then the wool, cotton and linen industries compete with each other. Shall we burn gas or electricity? Then these industries compete with each other.

Still further, our incomes are limited so that we have to decide carefully how to spend. Shall we spend the five shillings we have on a book or a hat? Then the book industry competes with the hat industry—on a theatre, or on a dinner? then the theatre industry competes with the catering industry.

Lastly, we have the five shillings—shall we spend it or save it? We have the choice. Then industries which produce such goods as machines—which are known as Future Goods—compete with those which produce goods that are wanted for immediate consumption—which are known as Present Goods.

Competition, then, is not merely the competition of pro-

ducers to produce as cheaply as they can and sell as dear as they can. For even if that competition were eliminated, our Economic Society would still be a Competitive Society.

Yet within this Competitive World there are forces working against "the free action of individual self-interest," as competition has been defined. There are various economic frictions preventing the free play of competition.

One is the natural inertia of mankind, better known as custom and habit. People buy in the same shop, when a new shop may be the cheaper, or the same article when there is a better article on the market. For the known is trusted; people are suspicious of change.

Another is general ignorance—in spite of skilful advertising and marketing—of any new product, or even of where to obtain it.

Also there soon grows up in every locality, among sellers of similar commodities, a tacit understanding not to undersell. Ideas of a fair price begin to have a stronger appeal than those of a competitive price. In periods of slump, it is true that such ideas may not be very powerful, but in normal times they hinder the full force of competition.

Workers, too, may know where to sell their labour at a better price (that is, where they can secure a higher wage) but local attachments, and the very human desire not to uproot oneself from familiar faces and places, may keep them in the locality. Labour, and to a smaller extent capital, is generally immobile.

Among working men, too, there has grown up a feeling that unrestricted competition among themselves may injure their standard of life, so that they agree not to compete, and form associations and trade unions in order not to sell their labour below a standard wage and standard conditions.

Further, Association is a very prominent feature of everyday life. People associate for all sorts of purposes, for economic objects, for social objects, for religious purposes; and their

variety and range can be seen from such associations as the Federation of British Industries, the Consumers' Co-operative Store, the Friendly Society and the Slate Club.

Lastly, competition logically destroys itself. For if firms begin to compete recklessly, then the result is either that the stronger firm destroys the weaker or that the competing firms, unable to face the falling returns, combine. In either case, competition is eliminated.

The nineteenth century and the beginning of the twentieth century have therefore seen the formation of Trusts and Combines, of Cartels and Combinations. Because there is competition to sell and competition to buy, and because this competition lowers profits to sellers and raises prices to buyers, there has grown up the desire to avoid lower profits and higher prices by combination to sell and combination to buy.

Besides the desire to avoid the full force of competition, there are other conditions which encourage Combinations.

If industry is strongly localised, then there will sooner or later be developed a common policy among the competing industries, perhaps in dealing with labour, perhaps to seek parliamentary aid, perhaps to market their goods. This tentative common policy may develop, first to common trade agreements, then to some form of combination.

But stronger than all these reasons are the Technical considerations of the industries concerned.

Some industries, such as the heavy steel industries and the shipping industries, involve such a large outlay of capital, the material used is so heavy and bulky and costly, that transport charges would be prohibitive if the industry were not strongly centralised. In addition, owing to the very heavy capitalisation, the industry must produce at or near to capacity not to run at a loss. Consequently advanced planning to meet the effective demand is essential. A central organisation is, therefore, the most economical. It knows the market, it knows the producing capacity of the organisation. It can specialise works

just as a single firm specialises departments. The actual cost of the article produced is in proportion to the running expenses of the business so small, that the more articles there are produced, the cheaper per unit are the running expenses of the business. Combination, therefore, soon develops among those industries in which the ratio of Overhead Costs to Prime Costs is high. It is in fact more economical to have a large combination, for if firms insist on competing, because the overhead charges are so high, losses are certain and bankruptcies frequent.

Combination, therefore, offers great advantages both to Society and to the individual.

To both it offers an intensification of the further economies of large scale production. The Combine can, in addition, concentrate production in the best equipped factories, in some cases even closing down various factories where production costs are high. It can produce more economically, for it does not produce haphazardly; it knows the market. It can pool patent rights and secret processes; it can obviously reduce competitive advertisement and competitive selling agencies. It can save on cross-freights, for it can specialise each factory in relation to the locality and to its transport facilities. Because of a fairly stable market, production is rarely jerky, and as profits depend as much on output and on turnover as on price, its profits are generally large. It can, in addition, make the most economical use of its by-products.

The Combination and the Trust enjoy to the full these Social and Productive advantages; it is because they also have Competitive advantages that they are feared.

Society relies on Competition. The Trust, to some extent, eliminates competition. Competitively, it can use the weapon of the Boycott and of Price Differentiation to secure its industrial victory.

It can use its influence to prevent supplies reaching competitors, by threatening to withdraw its very large custom. It

may make it difficult for competitors to transport or even to sell their product by threatening to withdraw its custom from the transport agency, and by refusing to supply those retailers who stock the goods of the competitors. This is the weapon of the boycott.

It can, in addition, persistently undersell its competitors in any area (recouping itself from the high profits made elsewhere), and, when its competitors have been driven off, it can raise the price of the goods. So shipping firms offer special rebates to those who continually use their liners.

Combinations and Monopolies may mean a scientific adjustment of supply to demand, but, in a society where economic self-interest is assumed, monopolists will raise prices, and will take from the consumer the benefit of a free market. For these reasons they have generally been deprecated.

There are different types of Monopolies, varying in structure according to the law of the land and the nature of the industry.

On the Continent, the typical Monopoly structure is the Cartel, which is really a federation of associated industries, acting in agreement to sell their product. The various firms entering the Cartel agree on a division of the selling field, on the price to be charged in each area, on the output of each factory. Its peculiar strength lies in the comparative independence of the cartelised firms while combining for selling purposes. For example, in the Westphalian Coal Cartel, coal is dearest at the pit-head, cheapening in price as the distance from the mines increases.

In England and America, however, such agreements are considered to be "in restraint of trade" and have no legally binding force on the associating firms. Consequently Mergers are formed; that is one company buys up the shares of the other companies and cancels them, or a Holding Company is constituted which buys up a majority of the shares of the separate companies, and so controls them, or the competing firms combine their capital and their directorate and create a Trust.

There are two types of such combinations. When the

competing firms which have been engaged in selling or producing similar commodities combine, the combination is horizontal—as when Grocery shops amalgamate. When firms engaged in different stages in the production of the same commodity combine, the combination is vertical, as when a soap-works has its own fishing fleet and chemical works. Although combination has been secured in both cases, the incentive was not the same. In Horizontal combination the threat to the consumer is greater, for he has few alternative sources of supply. A Vertical combination is often formed simply because it is more economical to have the various stages of production under the same control. One “stage” is the consumer of the other, so that production is smoother. While Horizontal combinations attempt to take from the consumer any alternative source of supply, there may be many Vertical combinations running parallel. Of course, an organisation which combined both the Vertical and Horizontal structures would have immense industrial power. One of the most powerful monopolies of the world, the United States Steel Corporation, has secured the advantages and the economies of both.

There is a further type of combination, which, apart from its structure raises political implications.

Such industries as gas, electricity, tramways, the post office, railways, are, from the technical nature of the industry itself, best organised as Monopolies. In all these the Overhead Costs are highest in proportion to Prime Costs, so that only as a monopoly can the industry be economically run. For example, it costs as much to run a train or a tram empty as full. The plant to supply gas or electricity must be complete, whether the whole area uses them, or only a part. In all these industries, too, the market is limited by the equipment of the industry, the railway along its lines, the gas along its pipes. In these industries, competition would be socially wasteful and economically impossible. It would not pay to lay down two parallel railway tracks or tram tracks, or two parallel gas pipes in order to give

the consumer the advantages of competition. For in such industries the initial outlay is the largest, and if the service is not fully used every competing firm will fail.

For example, suppose that two gas companies were allowed to compete in the same area, to put down two sets of pipes and two sets of all sorts of domestic services so that the consumer should have a choice. Small figures are taken merely for illustration. Suppose that the initial capital of the two gas companies is £1000 each. Now if there were only one company, its expenses might be £80 and its receipts £140, that is, it would make a profit of £60 and so be able to pay a dividend of 6 per cent. When the two companies begin competing, the expense will not vary very much, for it does not cost much more to supply 500 people than 300 people with gas. The expense might still be £80, let us say it will be £70 to each company. But because they have halved the market, the profit of each cannot be more than £70, so that no dividend can be paid at all. The consumers might gain as long as competition goes on, but the social loss in applying £1000 to ruin industry cannot be condoned, and ultimately competition must vanish.

Consequently Society is in a dilemma. It fosters competition in industry, because it can regard such competition as competition on the part of business men to *serve* the Community. It protects the consumer by giving him an alternative market. It compels the economical administration of industry to enable the product to be sold cheaply.

But, in these industries, to give the consumer an alternative market is to court the failure of all the firms in the industry, besides the social loss of misapplying necessary capital. In such industries, monopoly is a social necessity as well as an economic asset.

Consequently, in such industries, the State departs from its rule of not engaging in trade. If monopoly there must be, then let the State or the Municipality be the Monopolists, for it is hoped that in a democratic community its power will be

controlled. This democratic control may take various forms. Direct Control, as in the case of the State Post Office or the Municipal Tram Service, or Indirect Control, as in the case of the Railway and Canal Commission and the Electricity Board. Such control is facilitated by the nature of the industries. They lend themselves to routine treatment, there is no great marketing skill required, there is no possibility of foreign competition, there is no problem of a fluctuating supply of raw material, there is no possibility of incursion of rivals, and in addition a steady and almost known demand.

Economic Society still relies on competition for its commodities and services; only when competition is technically impossible does it step in.

There is a further example of State monopoly when the State, by Law, assumes to itself the right of supplying a commodity, and forbids any rivalry, such as the French match monopoly. In such cases, however, the State monopoly is really a form of taxation, the State drawing part of its revenue from the monopoly.

The problem now arises: How large can Trusts and Monopolies grow? Are there any limits to the "trustification" of industry?

The first limitation is just the limitation of human capacity. There are not enough men able to control such mammoth undertakings, whose employees are equal in number to the population of a small state. Even if there were a few such Industrial Captains, there is no guarantee that there will be equally capable successors.

Certain types of businesses are more successful on a small scale than on a large. In those industries where standardisation is not desirable, which have to cater for individual taste, the smaller unit will always predominate.

The monopolist must always face the possibility of competition, if his profits are at all such as to make it worth while, and, in addition, he has always to fear the possibility of substitutes, or of changing demand.

Large Scale Industry is ultimately limited by the extent of the market. An example will best illustrate this. A motor-car manufacturer finds that by making 10,000 cars he can sell them at £300 each, by making 20,000 he can sell them at £250 each and by making 40,000 he can sell them at £200 each. He finds that at £300 he can sell 8,000, at £250 he can sell 20,000 and at £200 he can sell 36,000. Obviously, it would not pay him to increase his output to 40,000, because he could not sell that amount at a profit.

The increasing use of transport, of course, extends the market. The "Ford" has invaded Africa, the "Austin" has invaded Australia, even a new home market has been tapped, but Large Scale Industry is still limited by the market, and Trusts and Monopolies cannot sell to people who do not want to buy.

Lastly, a point is reached where an increase in the scale of production is followed by a less than proportionate return. But this needs a special chapter.

CHAPTER VI

POPULATION

Is England overpopulated? At various times this becomes a very urgent question. To an overpopulated England have been ascribed her unemployment problem at home, and her colonial adventures abroad. Whenever an economic evil becomes pronounced, some people see it as the result of over-population.

Yet even to-day, there are vast tracts of England sparsely populated. How then can England be overpopulated if there is still room for people? Consequently, by over-population it is not meant that every available space is already occupied.

It is then argued that there is a direct connection between population and economic conditions, and that if there were fewer people living in England, then those who remained would be "better off."

But then the question arises, how many fewer?

A century ago, England had a population of 14 millions; to-day her population is 40 millions. Were the people living in England in 1832 better off than those of 1932? It is agreed that our standard of life has risen enormously in the last century, but so has the population.

Or again, England lost three-quarters of a million men in the Great War of 1914-1918. Has the standard of life risen as a consequence? If one person lived in England would he be better off? Obviously not. Then what is meant by over-population?

This problem of population became very acute in England in the later part of the eighteenth century, and the Rev. Thomas Malthus, Vicar of Albury in Surrey, in 1798 wrote a book on the subject, which he called *An Essay on the Prin-*

ciple of Population as it affects the Future of Society. He was struck by the rapidity with which the population of England was then increasing. He felt gloomy over the future, for he argued that food cannot increase at the same pace as people. He thought that population tended to increase, unless checked by vice and misery, in geometric ratio, while the supply of food increased in arithmetical ratio only. It appeared obvious that if (say) 20 units of labour and 20 units of capital were applied to the cultivation of an acre of land—then the crop one year might be (say) 100 bushels of wheat. But, in the succeeding years, the application of the same labour and capital would give a decreasing return. For land wears out, and this Law of Diminishing Returns seemed to justify his gloom. For it required a far greater effort every year on land to give the same return. But population continued to increase. Consequently a point would be reached when there would begin a “struggle for existence,” as the pressure of a growing population on a food supply which could not grow at the same rate, began to tell.

His arguments and his fears were long used to justify the attitude of the Government, the attitude of *laissez-faire*, of non-interference, in dealing with such problems as poverty and unemployment. For governmental interference only meant that population would outgrow its food supply.

Even to-day it is argued that an increase in the numbers of the people, by a natural excess of births over deaths, or by alien immigration, would be harmful to the interests of the working population, because an increasing number of people would compete for work.

It is apparently forgotten that all new-comers come not only to sell their labour (that is to seek work), but also to buy goods and services, which would necessitate more employment to meet their wants. As John Stuart Mill effectively pointed out, “with every mouth God sends a pair of hands.”

We are, therefore, again left with the problem: How many people will make England over-populated? How many under-populated? How many would be just the right number? Let us imagine Robinson Crusoe on his island. If he were the only inhabitant, then the island might appear to be under-populated. But is it? Robinson Crusoe would have ample room in which to roam. But it has been seen that when it is said that England is over-populated, it does not mean that England is so full that no more people can enter. Then would his standard of life be high? He could cultivate the soil, and because he had the whole island as his domain (he would then employ "extensive" cultivation), he would probably secure sufficient food and survive. But his "standard of life" would be very low indeed. Robinson Crusoe Island then would be evidently over-populated with only one inhabitant! Now if another shipwreck occurred, and he were joined by another Crusoe, then, because they could begin an elementary sort of division of labour, and could cultivate the land more intensely, there would be more than a twofold increase in the produce of the soil. Every fresh shipwreck would bring fresh help, and every addition to the population would be of greater economic gain. It would make possible greater division of labour, and a more intense cultivation of the soil. The output per head would increase as the number of people co-operating increased. Growth of the population would be welcomed instead of feared.

Now when would Robinson Crusoe Island become over-populated? As shipwrecks increased and population on the island increased, the island might of course become *overcrowded*, but long before that took place the inhabitants would be faced with an extremely unpleasant situation. The land would begin to yield a less than proportionate return to the effort and capital devoted to its cultivation. For the same expenditure of capital and effort on a given piece of land begins after a time to give a decreasing return.

If the mariners had taken with them the economic ideas of our industrial society, they would nevertheless find that in spite of their knowledge of specialisation, in agriculture opportunities for close division of labour were not so numerous as in industry. For food-growing is governed by the sequence of seasons and it would not pay any man to become a specialised reaper or sower, for he would be able to use his specialised skill in only a few months of the year. That is the reason, of course, why agricultural labourers have a more general craft-

Number of people	Output	Output per head	Amount of increase from each additional worker	SEE PAGE 54 FOR DISCUSSION OF THIS TABLE
1	5	5	5	Increasing Returns
2	12	6	7	
3	21	7	9	
4	32	8	11	
5	45	9	13	
6	60	10	15	
7	70	10	10	
8	80	10	10	This is the Optimum Population and Point of Maximum Return
9	81	9	1	
10	81	8.1	0	Decreasing Returns
11	81	7.3	0	
12	80	6.6	reduction	
13	78	6.0	reduction	

knowledge than any specialised factory worker.

On the Island the inhabitants would find that after a time the yield per head of the population would begin to fall, and that if more shipwrecked mariners landed, then in spite of division of labour and even their increased hard work, the yield from the land would not increase proportionally. Land becomes exhausted, for if it were possible to increase the food supply indefinitely, then the whole population of Robinson Crusoe Island—or of England—could be fed from a very small selected plot of land.

The above imaginary table shows how the increase of people on the Island brings greater production per head—up to a point—but that after that point (called the Point of Maximum Return) the yield per head declines. When one person lands and cultivates the land; then the total crop is, let us say, five bushels.

There is, therefore, on Robinson Crusoe Island (and the same would apply to England) a certain population at which the soil would give the highest return per head. That population would be the *best* or *Optimum* Population for the island, for any increase or decrease in numbers would mean a decline in the productivity of the island.

Malthus and his school were troubled by the decline in the productivity of the soil which set in after the Point of Maximum Return had been reached, which they then called by the name of the Law of Diminishing Returns. They neglected or ignored what can equally be called the Law of Increasing Returns as applying to land when the population is increasing to the Optimum Number.

For as population increases, so does the return from the land, till a Point of Maximum Return is reached, which coincides with the Optimum Number of people. If there are less than this Optimum Population, or if there are more than this Optimum Population, there will be a decline in the yield from the land from the Point of Maximum Return.

Modern economists prefer to have one Law to express these various relationships. Instead of a Law of Increasing Returns to this Maximum Point and a Law of Decreasing Returns from this Maximum Point, they prefer to call this the Law of Non-Proportional Returns.

By the Law of Non-Proportional Returns is meant that up to the Point of Maximum Return the output per head of the population can be increased by increasing the population, but that after the Point of Maximum Return any further increase in the numbers of the population will be accompanied by a decrease in the output per head.

In the modern economic world the same Law holds good, but other factors have now to be considered.

Few lands are now entirely agricultural, least of all England. All industries, the agricultural, the constructive, the commercial, the transport industries are well represented. Does the Law of Non-Proportional Returns apply to all these?

It will obviously apply to the Extractive Industries. Coal on the surface is easy to mine, and any addition of labour and capital will give more than a proportionate return of output. As the pit becomes deeper, more expensive machinery and labour are needed to obtain the same output—that is Diminishing Returns become obvious, or—what is the same—Increasing Costs begin to operate. It now costs more capital and labour to obtain the same unit of coal, until a point will be reached at which it will no longer pay to work that mine.

The same law applies also to the Constructive Industries. If the Cotton Industry is taken as an example; starting with one workman, an increase of employees will produce a faster increasing product (because of the productivity of specialisation) till a Point of Maximum Return. After that point, the output per head will begin to decline. For any further increase of workfolk will mean that they will hinder, rather than help each other, and ultimately the cotton itself is an agricultural product and will be produced under conditions

of diminishing returns. Men can no more produce an unlimited amount of cotton goods than an unlimited amount of potatoes. It can therefore be said that the Law of Non-Proportional Returns will apply equally to Extractive or to Constructive Industries. In agriculture the tendency to Diminishing Returns will be relatively more pronounced. In Manufacture, Man is far more an active agent, and, because the products are more varied and are not demanded with the same intensity, they do not so rapidly reach the Point of Maximum Return. But, ultimately, the Law is the same for agriculture and manufacture. (This is the other check to an indefinite increase in the size of Large Scale Industries.)

The same Law will also apply to the Transport and Commercial Industries. An ocean liner will not travel twice as fast by doubling its coal supply. Up to a Point of Maximum Return, an increase of coal and labour will increase the speed of the ship. Then any further additions of coal and effort will give a less proportionate return.

There is therefore in every industry and in all industries combined a Certain Number of people who can secure the maximum output per head. There is also in agriculture a Certain Number of people who can produce the maximum output per head.

So that, in any given community which combines agriculture and industry, there must be a certain number of people who produce the greatest volume of production per head. That population is called the Optimum Population for that area. If England has this Optimum Population, then an increase or decrease in numbers would equally result in a fall in production per head.

It is of course difficult to say what the actual numbers of this Optimum Population for any given area may be. That will depend on the size of the area or country, on its natural qualities and on the qualities of its inhabitants, their ability to co-operate, to organise and to maintain peace and order.

Still another important factor would be the Capital equipment at the command of the community.

In agriculture, as in manufacture, better machinery and better knowledge may make it possible to increase the number of workers without decreasing the output per head. Land can be used more intensely in agriculture and in manufacture. The agricultural improvements during the eighteenth century in England increased the product per head of the population. In manufacture, the more intensive use of land may mean increasing the height of factories and buildings (although the London clay will not permit sky-scrapers, such as exist in New York, which is built on rock). Above all, increases in knowledge—the best seed, rustless wheat, hydro-electric power, artesian wells, better and cheaper transport—have made possible a larger population with a higher standard of living. Indeed, such changes in knowledge in the England of the eighteenth century made a larger population *essential*, in order to secure the full advantages of the economy of the division of labour. In that case, an increase in population, far from causing any reduction in productivity, has in fact been accompanied by a large increase.

It is, therefore, quite possible that the England of say 200 years ago, with a far smaller population than at present, was then overpopulated whereas to-day she may not be. For the Optimum number is not any rigid figure. As knowledge grows and as capital accumulates, then the Point of Maximum Return in agriculture and manufacture advances with an increasing population. Because this Optimum number is constantly changing, it becomes impossible to work out what should be the best number of people for any given area. For that reason, we cannot answer the question whether England is overpopulated or underpopulated. So far, the dismal prophecies of the Malthusian School have been falsified, for a far larger population is living in these islands at a far higher standard. So far, science has beaten the tendency of the nig-

gardliness of nature to give returns at a greater cost.

Those who argue that England is overpopulated, from evidence that production per head is declining, may be ignoring the fact that a decline in population below the Optimum Number would cause a fall in production as well as an increase above the Optimum Number. It is difficult to give any answer, which is more than personal opinion.

In addition to this problem of the Optimum Total Population, there is a parallel problem of the Optimum Distribution of this population between different areas and between industries. Just as it would be best for any area to contain its Optimum Number, for that would mean the highest number with the greatest productivity per head, so it would be best for every industry to have its Optimum Number, for then every person would be fully employed at the task which best suited him. On the whole, people tend to flow from those industries in which they are not wanted to those where they are wanted.

In the eighteenth century, there was a great movement of people in England from South to North. In the nineteenth century, there was a great migration of Englishmen from the country to the towns. The actual number of people in the country did not become less, but only less in proportion to the total population.

What caused these changes in the distribution of the population?

It has been seen that Society fosters economic freedom. It permits any person to enter any craft, it allows any person to start a business. In economic terms, it permits any person to sell his labour wherever he wishes; it consents to any person's trying to satisfy effective wants.

People, on the whole, will want to live in the most agreeable place they know, but the agreeableness of the place will depend a great deal on the price which the locality is offering for labour. The price of labour is called a wage or salary (that is the reward offered to labourers to induce them to take part

in production), and most people will want to live where wages are highest.

When wages in a particular industry are high, it suggests that there is a demand for labour there, when it is low it indicates that there is no great demand. For generally, when a commodity is dear or highly priced, it encourages the factors of production to produce that commodity or service. Therefore wages should be high in those industries producing those commodities and services. When wages were higher in the industrial North, people moved North; when wages are higher in towns, people leave their villages.

If people move to the high-wage centres, how far do Wages affect the total number of people offering work? Or, what is the same question, How far do Wages adjust the population between the various trades? If the wages in a particular trade affect the number offering to work in that trade, how far do wages as a whole affect the numbers of the total population? Population increases naturally by the excess of births over deaths. How far wages influence the birth-rate is very doubtful. The birth-rate may be affected by the state of medical knowledge, by housing conditions, by wars, by disease, by a general public opinion on the size of families, but it appears that those who have the larger incomes tend to have the smaller families, and therefore that high wages do not mean large populations.

How far then do wages affect the numbers in different trades, which might make for the Optimum Distribution of people between the different trades and industries? It is possible that the attraction of a higher wage has been the chief cause of the migration of peoples. The flow of people to the New Lands of America, to the Empty Lands of Australia, has been due to a search for higher wages or better economic conditions. Religious and political persecution has accounted for some migration, too, but economic causes have more often been the stronger. But, as in so many cases, here,

too, frictional influences prevent the free flow of labour, where it might secure the best remuneration and so make for the Optimum Distribution of people among industries.

Governments check immigration by Aliens' Laws, and, as in the case of the U.S.A., by Alien Quotas. The labourer himself, in addition, often cannot take advantage of the offer of a higher wage elsewhere, because of ignorance, or because of a dislike to changing his social environment, especially if he has reached middle age, or because of sheer inability to enter a new calling when he has given the best part of his life to the trade in which he works, or because he has not the means to qualify in the new opening.

These influences are, of course, more powerful as between country and country where social environment changes completely, but even in a particular country itself, such influences may prevent the best distribution of labour. No county in England would pass a bye-law preventing those from other counties seeking work within its area, but "frictional" influences nevertheless exist which prevent rapid and easy migration, or mobility of labour.

The lack of houses might help the human inertia (for example an unemployed middle-aged clerk could not easily begin preparing to become a doctor when doctors' wages were high, even although he might have the means). In addition, the free flow of labour might be checked by Trade Union conditions, either because as a member he may be receiving out of work allowance which keeps him attached to the trade, or because Trade Unions may make it difficult for him to enter the trade by imposing onerous conditions for entry.

As a consequence, the main adjustments of the number of people to any craft are made by diverting the flow of youth coming into the ranks of labour. Here again, however, the wage inducement, important as that is—for every boy would like to enter the best paid calling—is not the final or the deciding one.

On the whole, occupations tend to be hereditary. Children tend to do the same work as their parents. The father can often secure their entry, if entry is difficult; Trade Unions frequently give preference to sons of members, the boy is brought up, so to speak, in the craft, and enters it as the easiest thing to do.

In many cases, too, industry is highly localised, so that there may be but few alternative trades for the boy to enter. At Swindon most boys enter the railway, at Bradford the mill, at Durham the mine. Even if the boy wishes to enter a higher paid trade, the lack of parental means may prove the deciding hindrance. The scholarship system and the school leaving advisory committee may to some extent mitigate this rigidity, but on the whole these social frictions prevent even youth from responding smoothly to the economic motive.

If people entered the industry offering the highest rewards (wages), there would be some reason to believe that they were doing the work most wanted by buyers, who expressed their wants through the price they were willing to pay. But these frictional influences have the effect of keeping people in less well-paid work than is available in some other place or trade. As changes in the methods of production and in the demands of buyers constantly necessitate re-adjustments in industry, these frictional influences may frequently be the cause of unemployment.

It can therefore be concluded that the reward offered for work has no great effect in adjusting the total number of people offering work to the total work available and that various economic frictions prevent the wage offered from securing the best occupational distribution of the population.

By population here is meant the working population. For those who own private property can lend it to organisers to assist them in production and they are therefore in a position to obtain goods and services without working at all. On them obviously the wage offered by a particular industry will have

little influence. Of course a great many do in fact work, but their conduct indicates that while the desire for payment is the main driving force in production (payment in this case for work) it is not the only force. Because, too, labour cannot be separated from the labourer (as interest and profit and rent can be separated from their recipients), the younger generation may suffer from the fact that their parents were unable to give them the necessary training to fit them for the future, so that both the quality and the volume of production may suffer in the coming generation. The State consequently supplies many goods and services which are likely to affect the quality of its future citizens and the volume of future production. Such State services are education and health services, for if these were left to be bought in the ordinary way, then the consequences might be deterioration in both the quality and quantity of production in the future.

CHAPTER VII

THE PROBLEM OF VALUE

AN extraordinary and striking phenomenon of Economic Society is the high value it places on such things as motor-cars and diamonds, and the comparatively low value it places on far more useful commodities such as bread or meat. How are these values decided? Who decides them?

With the application of the division of labour and the increasing specialisation in industry, no man produces commodities and services for his own consumption. No man can be self-sufficing. Man produces and exchanges his product for the commodities and services that he wants. In order to make such exchange equitable the goods and services have to be valued. The value of a commodity or service is, therefore, the rate at which it exchanges for other commodities and services.

Exchange, of course, implies exchange for mutual advantage. One person does not get the better of the other, unless force is used, and then there is no free exchange. If Canadian wheat is exchanged for English machinery both countries gain by the transaction. Jevons pointed out that "exchange is the barter of the comparatively superfluous for the comparatively necessary." England has a superfluity of machinery and finds Canadian wheat a necessity, Canada has a superfluity of wheat and finds English machinery a necessity. Both gain by the exchange.

That goods are exchanged against goods is not seen because of the use of money, but obviously the utility of the thing bought equals the utility of the money given for it.

Fundamentally, of course, Value is an ethical conception, for different peoples will value different things according to

their intellectual development and their moral standards. Economic Society, however, because it is based on the division of labour and consequently on exchange, expresses the values of the commodities and services produced for exchange concretely, in money terms, as Prices. So that the price of a motor-car is high, bread is cheap.

It is obvious that for anything to have value at all it must have some use. A useless thing is valueless. But some things have value to their owners only—a treasured memento, a lock of hair, a hand-made chair, a faded photograph—these cannot be exchanged. Their values are *subjective*. To these Adam Smith applied the term of "Value-in-Use." Modern economists prefer the term Utility. Other commodities and services can be exchanged, for they are wanted by most people. Their values are *objective*. To these Adam Smith applied the term "Value-in-Exchange." Modern economists use the simple term Value.

Because direct barter is clumsy, exchange takes place through the medium of money, so that money measures the exchange-rates of commodities and services. The price of the commodity or service, therefore, indicates its *value in exchange* as measured in terms of money. If boots cost £1 a pair and a suit of clothes costs £4, then the value of a suit of clothes is four times as great as that of a pair of boots.

Price may not always measure value. When commodities are not for sale, they have Value but no Price. Nevertheless, Price is an exceedingly important factor in measuring Values, for it permits comparison between apparently non-comparable commodities and services. How can we compare the value of a singer's voice with the value of a motor-car, a doctor's skill and a picture, except by price?—for price estimates our values. So close, indeed, is the relationship between the two, that in certain fashionable localities things may be deliberately priced highly to suggest high value. Yet there are differences. As Hadley puts it, "A price is a fact. Value is an estimate of

what price ought to be." The price is the same for all; the value may differ to different people according to their taste, their morals, and their intelligence.

The Theory of Prices is, therefore, narrower in scope than the larger and more general Theory of Value. What then makes commodities and service have value? Controversy has raged fiercely round this question, and round the whole Theory of Value. A very powerful section still maintain the Labour Theory of Value. It was advanced by "Classical" economists such as Adam Smith and Ricardo, by "Socialists" such as Robert Owen and Rodbertus. Karl Marx gave it its power and force in the modern world. The Theory states that the value of a commodity or a service depends ultimately on the amount of labour embodied in it. After all, it is argued, Labour and Land are the two fundamental factors of production; all wealth is the result of the application of labour to land. Even machinery and all other forms of concrete capital are the result of human effort applied to the "gifts of nature" and can therefore be regarded as "saved up labour." Labour is therefore the source and the principal measure of Value.

Both Adam Smith and Karl Marx recognised that for a commodity to have value it must also have Utility, but even Adam Smith was faced with the apparent Paradox of Value—the fact that the commodities with the greatest Use-Values, such as bread and meat, have low Exchange-Values, whilst those with high Exchange-Values, such as motor-cars and diamonds, have low Use-Values. Karl Marx, in addition, recognised that the Utilities of commodities are so different to different people that he could scarcely look to Utility as a basis of Value.

In the hands of the Marxists, this Theory has been used to criticise and condemn the "capitalist" organisation of industry. Labour is the source and creator of all value, yet because the "master-class" own the instruments of production

they can compel labour to work for a subsistence wage. The difference between the wage paid and the real value of the product of labour constitutes the "surplus-value," which as profits, interest and rent, goes to enrich the capitalist class.

This Theory has its attractions. It appears to be just, that what takes two days to make should have double the value of what takes only one day to make. It appears to be right, that the value of things should bear some relation to the toil involved in making them. As an explanation of existing values however, the Theory has little relation to fact.

Value, it has to be seen, has to be measured. Now if labour is the standard of measurement, which unit of labour is to be taken as the standard, for not all labour is the same. Is it to be the labour of the inventor, or of the doctor, or of the navy? Even if by Labour only *manual* labour were meant then there is still a difficulty. What would be the unit to measure the value of the output of the spinner and weaver, or of the organ-grinder and the footballer? And even if the same *kinds* of labour were compared, then labourers differ in output. Is then a time unit to be taken? Then the gifted and skilled would be penalised, for they would produce the same output as the unskilled and average labourer in less time.

Karl Marx was indeed conscious of these difficulties, and he tried to give several explanations of the term *labour*. At one stage he took "labour-time," which would have made it advantageous to employ the untrained and the unskilled, for their longer and slower labour would then create more value. Then he suggested unskilled labour as the unit, then again average labour. Unable to accept any of these, he finally adopted as his standard "simple abstract human labour" or "socially necessary labour." Again, however, he left this difficulty unsolved. For how explain why a week's labour of, say, a bus driver is worth three times that of a farm labourer when they are both equally socially necessary?

Moreover, if labour has been applied to the making of an

article, which when completed is found to be faulty or useless or unwanted, the labour can justifiably be called misdirected, and, therefore, socially unnecessary, but people will not consciously make valueless things. People will try to apply their labour to produce commodities and services which are highly valued. In other words, instead of labour creating value, *labour will seek to make those things which have value*. The value of the thing will decide how much labour shall be devoted to its production.

What then makes such commodities and services valuable if it is not the labour devoted to their manufacture? For in some cases the commodity will *lose* in value when *more* labour has been applied. A picture "over" done, a carving over elaborated actually loses in value. Lastly how is labour itself to be valued? If it is labour which creates all values, then how is one to measure the value of the labour? For

1. If the value of a commodity depends upon the amount of "socially necessary labour" embodied in it, and
2. The amount of "socially necessary labour" is discovered when the commodity is valued or exchanged, then
3. Because its exchange-rate is its value, the Labour Theory of Value simply states that Value depends upon Value, which is a truism, but which does not answer the problem as to what does create value.

The Labour Theory having been proved inadequate as an explanation of value, the Cost of Production Theory was advanced by J. S. Mill to solve the problem, and as an explanation of value in the modern world. The Theory simply states that the Value of an article depends upon its Cost of Production. The argument which is used to support the theory is that the economic world is competitive; consequently, if profits in an industry are high, more competitors will enter the industry and the increased competition will bring down the value of the article produced. If the value falls below the

cost of producing it, the weak will fall out of the industry, those remaining will see their profits reduced and consequently will reduce their output. Buyers who compete to buy the product will then force the value up again. Producers cannot for long sell below their cost of production, for they will become bankrupt; they cannot sell very much above, because of competition. The value of a commodity will therefore depend on its cost of production.

It was soon pointed out that certain industries have peculiar advantages—such as proximity to good markets or, in the case of agriculture, certain areas have particularly fertile soil, so that production costs will vary with different producers. The wording of the Theory was, consequently, modified to “The value of an article depends upon its cost of production under the most disadvantageous conditions prevailing.”

The apparent truth of this statement conceals very many difficulties. Production, it has been seen, is now very round-about; it is carried on ahead of demand and in anticipation of demand. If the anticipated demand does not materialise then the product is worthless, although costs of production have been incurred. The value of a misfit in clothing is hardly determined by costs of production, nor is the value of “shop-soiled goods.”

Often values change after the product has been made. In impoverished areas, house-property declines in value, in growing areas property rises in value. The opening of a new railway station will send up land-values in that area. A death in the royal family will cause the value of dress-clothes to decline and the value of crape to rise. Drought in Australia will send the value of cloth up, a bumper cotton harvest in America will send the value of cotton goods down. In two consecutive years in farming, the cost of production in growing corn may be the same. But in one year the harvest is poor because of rain and cold. The values of the harvests will differ although the costs of production will have been similar.

Like the Labour Theory, this Theory does not explain the reason for scarcity values—the high value society places on a Rembrandt, or even on exceptional personal ability. Costs of Production will not account for the scarcity value of central town sites, nor of first editions of successful authors.

In some industries, it is difficult to work out the cost of production of a unit of the product. On a railway, for example, where the trains run whether empty or full, what is the cost of carrying a single fare? or of running an extra train?, and how would the cost of production decide the rates for travel? Overhead charges go on whether people travel by train or not. The railway, of course, charges “what the traffic will bear”—that is as high a price as they think people will pay.

Moreover, many industries will sell below Total Costs, but not below Prime Costs, rather than allow the factory to stand idle and allow competitors to invade their market. Every firm has certain Overhead Charges, which go on whether the firm is producing or not. Rent has to be paid, the salaried staff have to be paid, interest on borrowed capital has to be paid and so has insurance. In such a case, if the owner of a firm can cover the costs of labour and of raw material and sell at a price which contributes however little to his overhead charges, he will keep the factory going and hope for better times. To which Costs of Production does this Theory apply—Total Costs or Prime Costs? For when a factory ceases working, only the Prime Costs stop; the Supplementary Costs (which with the Prime Costs make up the Total Costs) go on.

Again, too, costs of production will vary with the state of the industry, and with output. The industry may have reached the Point of Maximum Return, and any further increase of labour and capital will give a less than proportionate product. Such may be the case in agriculture or in mining. Or the industry may give a greater than proportional return

to any expenditure of labour and capital. Such may be the case, for example, in the printing trade where, once the type is set, it costs little more to print off 20,000 copies of a book than 10,000. In other words the costs of production will depend on the amount produced, and this again will vary with the industry concerned, according as the cost per unit of output increases or decreases with increasing costs of production. There will therefore be different costs of production per unit for different amounts of a commodity produced.

Costs of Production will not explain the values of goods produced under monopoly conditions—where the monopolist can actually raise the value of his output by curtailing production. Whether he will of course depends upon the type of industry he controls. He will generally work out the different costs of production for varying amounts and he will also estimate his market, that is the demand at different prices. He will put on the market the amount which will give him the greatest returns. If his industry is such that output increases, on further application of capital and labour, then he will sell a large amount at a small profit per unit; for that will give him a greater total profit than a large profit per unit on a small sale. If however his industry is subject to diminishing returns, then a smaller output and a larger profit per unit will give him the greater total profits.

It is true that perfect monopoly does not exist, but imperfect as the monopoly may be the cost of production will not explain the value of goods sold under such conditions. But neither does perfect competition exist, so that again costs of production will not explain value.

Lastly, and this is decisive, the Costs of Production which according to this theory explain Value, are themselves made up of a number of commodities and services which have to be valued. In order to produce at all, the industrialist has to buy land, and labour, and capital; that is, he has to buy his factory and the land on which it is built; he has to buy the

raw materials of his trade; he has to buy his labour. In order to buy these, he has to value them; what decides *their* value? Like the Labour Theory, this theory argues in a circle. The Cost of Production decides the value of the product, but what decides the value of those factors entering into and making up the Cost of Production—*their* Cost of Production and so on?

Neither the Labour Theory nor the Cost of Production Theory therefore explains what creates Value, what decides the values of the commodities and services that are produced. What then does decide Value?

So far the Theory of Value has been considered from one side only, from the side of supply. But it is very obvious that people will try to apply their labour to making those things that people want. And industrialists will incur costs of production to produce those things that people want. Then the buyer seems to have the deciding voice in production. He decides whether or not to buy the commodity or service, he decides how much to buy, he decides at what price to buy. By skilful advertising he may be persuaded to buy a certain commodity (this adds, of course, to the Costs of Production), but no industry can live long by making articles that are not really wanted. People buy those things that are useful to them. Does Value then depend on Utility?

There are difficulties in the way of accepting such a solution, the difficulties that made Adam Smith and Karl Marx look to "supply" as the deciding factor in the problem of Value.

First, the value of an article may remain the same, while its Utility will vary to different people at different times. A loaf of bread costs the same to the rich man who can afford a large price, and to the poor man who can afford it with difficulty. While its price remains the same to both, its utility obviously varies with the buyers. G. Bernard Shaw pointed out that "At one end of the town there are dinners without

appetites, and at the other, appetites without dinners."

Wants evidently influence Value, but how?

The second difficulty is the one already mentioned in the Paradox of Values. For a commodity or service to have Value it must have Utility, but Utility and Value seem to vary inversely with each other. Goods with the greatest Utility have the least Value-in-Exchange (such things as bread and meat), while commodities which have the highest Value-in-exchange (such as precious stones) seem to have the least Utility. Again a poor harvest will often bring in a larger total price than a good one. Does the bad harvest satisfy wants better than a large harvest? Has it a greater Utility? for its Value is greater!

What then decides Value?

The answer is that no person buys or wants the whole harvest or the whole supply of any commodity. He wants only a very small quantity. The Utility of the total supply of a commodity is quite different from the utility of the small quantity which is bought and wanted. A unit of (say) raw cotton is more valuable when the harvest is poor because every unit is then of greater utility. The entire supply of bread is, of course, of far greater utility than the entire supply of diamonds, but the buyer never wants the *entire* supply of bread. He wants only a very small portion of the entire supply—just a few loaves.

For every buyer is faced with a very vital reality. If he buys bread, the first loaf is of the greatest utility to him, the second is of less utility; the utility grows less with every additional loaf until a point is reached when an additional loaf becomes a burden—a *disutility*. This tendency to diminishing satisfaction is apparent in all forms of consumption. All wants tend to satiety. No matter what one has, increases will give a less and less satisfaction until a point is reached when a further increase becomes a disutility. This Law of Satiabile Wants or of Diminishing Utility, then, says that the additional satisfaction which persons receive from any increase in the supply

of any commodity or service diminishes with every unit that is added.

It is sometimes argued that there are two exceptions to this Law. The drunkard apparently finds greater satisfaction the more he drinks. But then he is abnormal, and even he reaches a point when he is too drunk to drink.

Is there a limit to Man's demand for money? Can Money become a disutility? For the mere coins quite obviously so. No one but the miser enjoys watching his hoard, but even he would find—say—£100 in pennies a burden. No one wants money for its own sake; money is wanted for what money will buy. Now the use for money is so varied that newer and more varied satisfactions can be gratified, but ultimately these too begin to pall. There is no exception to the Law of Diminishing Utility.

The Utility of a commodity therefore diminishes as the supply increases. This tendency for additions to the quantity of a commodity to give a continually diminishing utility explains why people do not spend all their incomes on a single commodity. No person will go on buying a commodity until it gives no further satisfaction. He will, on the contrary, begin to compare the utility to be obtained from an additional unit of the commodity, with the satisfaction he could obtain by buying a unit of another commodity. If the price of the commodity remains unaltered, he will decide that he would obtain greater utility by spending on some unit of another commodity the money necessary to buy another unit of the first commodity. The unit which the buyer *just* decides to buy at a given price is called the Marginal Unit. The Value of a commodity will depend on its Marginal Utility. For example: a typist decides to buy four glasses of milk a day when milk is at 2d. a glass. We have seen that according to the Law of Diminishing Utility the fifth glass will give her less satisfaction than the fourth and so on. The 2d. that would buy her a fifth glass might instead buy her a pastry. If she

thinks that the pastry will give her greater satisfaction than the additional glass of milk, she will buy it. Everybody tries to get the maximum satisfaction from the way he or she spends their money. They try to spend it in such a way that they should not feel that a 1/- or a 1d. spent in one direction would have yielded more satisfaction than the 1/- or 1d. when it was spent as it was. They try to secure the maximum satisfaction by spending in such a way that the marginal coin spent on each commodity or service has produced the same amount of utility—for had the coin been spent in any other way, the change would have been to their disadvantage. This is sometimes called by the high-sounding name of the Law of Equi-Marginal Utility; that the consumer will so regulate his purchases that the marginal satisfactions derived from his different purchases will be equal.

The difficulties then which faced Adam Smith and Karl Marx are answered by the Marginal Utility Theory of Value. It explains the Paradox of Values, for it shows that the Marginal Utility of such things as bread is low because people have enough. If there were a famine the Marginal Utility of bread would rise and so its price would increase. The Marginal Utility of diamonds is high, because those who can afford diamonds already have their less costly wants satisfied and then value highly the satisfaction to be obtained from personal display.

Similarly this Theory explains why, if the supply of a commodity increases, its value will fall—simply because the additional supply will satisfy a less intense want than the previous supply.

It has been well pointed out that no Labour or Cost of Production Theory will explain why steak has a greater value than shin of beef from the same beast, or why corn has a greater value than straw from the same plant. The Marginal Utility Theory offers the best explanation.

We have seen that the Marginal Utility of a commodity is

the Utility of that amount which, in the opinion of the buyer, is just worth buying at the given price. But if the price of the commodity fell, then the buyer might either buy more of the same commodity or he might still buy the same amount, and because he had more money to spare he might buy something else which at the previous price he considered not worth while. Or a similar result might be obtained if the buyer's income were increased.

Our typist might buy a fifth glass of milk, either because milk was reduced in price or if her wages were increased. Conversely then, a rise in the price of milk, or a fall in the typist's pay will bring about a rise in the Margin—that is each glass of milk will cost more and she will drink less, for at the higher price perhaps the third glass of milk will be the marginal one.

Because a market is competitive, no seller can charge a variety of prices to suit different people's pockets. He will generally charge the same price, for otherwise the consumer who has an alternative will go to the cheaper shop and the cheaper price will fix the price for the others. Consequently at any given price there are some who obtain the commodity for less than they are really prepared to pay. There may be still others who will not buy at all, for they consider the Utility of the commodity less than the Utility of the other things they can buy at the same price. There is also an intermediary class, who are prepared to pay the price charged—they are the Marginal Purchasers.

Let us go back to our typist drinking milk. Rather than go without her milk she would be prepared to offer

- 4d. for the first glass
- $3\frac{1}{2}$ d. for the second glass
- $2\frac{1}{2}$ d. for the third glass
- 2d. for the fourth glass
- $1\frac{1}{2}$ d. for the fifth glass

Now if the milk were sold at $1\frac{1}{2}$ d. a glass, she would drink five glasses per day. If the price were 2d., she would drink four glasses and so on. If the actual price were 2d. a glass, then the Marginal glass of milk would be the fourth, which is another way of saying that it is worth her while to buy four glasses of milk at 2d. a glass. For to buy a fifth glass of milk would mean paying 2d. (the price charged), for what she regards as being worth only $1\frac{1}{2}$ d. Because the glasses of milk are all identical, the Marginal Utility of the fourth glass of milk is that of all the glasses of milk and the price of the marginal glass will be the price of all the glasses of milk. Consequently, Price measures the Marginal Utility of the commodity or service purchased.

As purchasers aim at putting all their money to the best use in order to obtain the maximum of satisfaction, the prices of all commodities and services tend to equal their Marginal Utilities as measured in money.

Let us return to our typist. When she bought the milk she obtained 4d. worth of utility from the first glass, $3\frac{1}{2}$ d. worth from the second glass, $2\frac{1}{2}$ d. worth from the third glass and 2d. worth from the fourth, which makes a total of 12d., which means that she would have been prepared to pay one shilling rather than go without her four glasses of milk. But in fact she pays only 8d. The difference between the price she would have been willing to pay and that which she actually paid is called the Consumer's Surplus. Here it is 4d.

The question now arises—if there was a Consumer's Surplus of 4d. why was she not charged, say, $2\frac{1}{2}$ d. for a glass of milk; for even then she would still be receiving 1/- worth of satisfaction for 10d. The reason is that (1) if the price were $2\frac{1}{2}$ d. she would not have bought four glasses of the milk, (2) and because the seller knows that if he sold at $2\frac{1}{2}$ d. a glass, the high price would act as a check on the demand for milk. Nor indeed does he want to sell as much as possible, for an increased supply of milk might actually cause a fall in price.

He sells at the price and the quantity which yields him the biggest profit. He finds that to sell many glasses of milk at 2d. per glass will give him a bigger profit than to sell a smaller number at $2\frac{1}{2}$ d. a glass or a much larger number at $1\frac{1}{2}$ d. a glass.

Similarly there will be many firms selling milk, or producing commodities and services. No firm wants to produce at a loss. It is therefore the Marginal Firm, the firm which is just able to continue producing, which is the deciding factor on price. Those firms which are better organised or better equipped or better situated, could of course sell below the price of the Marginal Firm. Their gains, that is the difference between the price at which they could sell, and the price at which they do sell, is called the Producers Surplus. (This Marginal Cost of Production applies not only to the Marginal Purchaser but also to the Marginal Output of any Producer.)

Lastly, just as consumers will tend to spend their income in such a way that the Marginal Utilities of all the things purchased are equal, so producers will tend to employ all the factors of production in such a proportion that the Marginal Returns from each are equal. That is producers will buy land, labour and capital according to their Marginal Utility.

CHAPTER VIII

SUPPLY AND DEMAND

THE value of a commodity or service, we have seen, depends on its Marginal Utility. That is simply a more technical way of saying that the Price of an article depends on Supply and Demand. The value of a commodity will decide how much labour, capital and land should be applied to its making. The value of the labour, of the capital and of the land—the value, that is of the factors of production which are applied to the making of commodities, is therefore *derived* from the value of the goods which they help to produce. If the demand for their product rises then their value rises. If the supply of their product is increased (with no corresponding increase in demand), their value will fall with the fall in the value of their product.

Now the value of a commodity depends on its Marginal Utility and the Utility of the commodity is related to, and influenced by Demand.

What exactly is meant by demand? It does not mean a vague want for a thing. It does not mean any passing whim. Producers will satisfy only the wants of those who have the Means to make their wants effective, and who have the Willingness to use their Means to make their wants effective. When for example the phrase “the demand for motor cars” is used, it may mean that we should all like a car if offered one. More accurately, it means that those who can afford to buy a car are willing to buy one at the price then ruling.

There is no such thing, therefore, as Demand apart from Price. The only demand which has any economic importance

is the Demand which, at the price, is backed by the Means to make it effective and a Willingness to do so. If the price of motor cars were lowered, then another section of people who want a car, who can afford one at the new price, and who are willing to buy one would increase the demand for motor cars. The market for motor cars has been extended, for a new class of buyers can make their wants effective. If the price were raised then some of those who can afford them now would not buy them at the increased price. The market for motor cars would contract.

Consequently, we can say that for most commodities, the Demand varies inversely with the price. The demand increases as the price falls, the demand diminishes as the price rises. The reason is obvious from the Law of Diminishing Utility. Our typist would have bought a fifth glass of milk if milk had been $1\frac{1}{2}$ d. a glass, although the utility of the fifth glass was not great enough to induce her to pay 2d. for it. As the price of milk falls, it becomes worth while to buy more. As the price rises, we decide to buy less of one commodity at the increased price and to divert our spending to the purchase of goods from which we expect to obtain greater utility.

It is the *effective* Demand for goods and services which decides whether they will be produced or not. But the term Effective Demand needs closer investigation.

When the Effective Demand for any commodity varies greatly with any change in price, we say that the Demand for that commodity is Elastic. When it varies but little with any change in price, then we say that the Demand for that commodity is Inelastic.

For example, if the price of bread were either raised or lowered the demand for bread would not vary very much. The demand for bread is therefore Inelastic. If the price of motor cars were either raised or lowered, then the demand would vary greatly. The demand for motor cars is therefore

Elastic. On the whole it would be true to say that the demand for the necessities of life is largely Inelastic, while the demand for the comforts or the luxuries of life is largely Elastic, although it has been seen that it may be difficult to classify rigidly what exactly is a luxury and what a necessity. Thus the large rise in the price of tobacco since the War has made no great difference to the demand for tobacco. Some may have regarded tobacco as a luxury, yet the demand for this luxury has proved Inelastic.

Again, the Demand will be more Elastic for those commodities which are expensive than for those which are cheap. The reason is that for very small items there is little thought or worry as compared with our more costly needs. For example, the price of salt or mustard or cotton-thread or nails is such a small proportion of our total expenditure that the demand for these small things is fairly Inelastic.

Also the elasticity of demand for part of the supply of a commodity is always greater than that of the whole. For example, taking the world as a whole the elasticity of demand for coal or iron or cotton is small. But the elasticity of demand for South Welsh Coal, or Swedish Iron, or Egyptian Cotton is far greater.

In addition, the demand for commodities for which there are many substitutes (or what is the same, where demand is alternative) will be more Elastic than the demand for a commodity which has none. The demand for tea is made more elastic by the fact that there are competing demands for coffee and cocoa. The demand for mutton is made more elastic by the fact that people can also buy beef or pork. If one of these commodities becomes cheaper, then those who consumed the other will turn to the cheaper commodity. The demand for the cheaper alternative will therefore expand in two directions. Those who ate (say) mutton will eat more, because it is cheaper and those who ate beef or lamb will turn to eating mutton. If the price, however, rises, the fall in demand will

therefore be greater too, for the consumer can more easily turn to an alternative.

Again, just as there is an Alternative Demand for Wool or Cotton, Gas or Electricity, so there is a Joint Demand for commodities—there is a Joint Demand for a pipe and tobacco, for cups and saucers. The ratio of one to the other may be Fixed, as in the case of cups and saucers, or pictures and picture hooks; or Variable as in the case of a pipe and tobacco, pen and ink. In all cases of Joint Demand a demand for one will involve a demand for the other. The elasticity of demand will, therefore, be the same for those commodities demanded jointly whose ratios are fixed. It will, of course, vary where the ratios are Variable.

Lastly, the demand for a commodity which is too expensive for the larger section of the population will be less elastic than the demand for a commodity which everyone is buying. For example, if books became cheaper, then those already buying books will buy more, and in addition those who have refrained from buying will now begin to buy books. If, however, the price of houseboats or of aeroplanes, or of hunting lodges becomes cheaper, those who already have these expensive commodities will hardly change them more frequently, and it is unlikely that at a cheaper price any new section of people will buy them.

The Effective Demand for commodities at a given price will vary, too, with time and occasion. In winter the Effective Demand for coal will rise, while the Effective Demand for iced drinks will fall off. In summer the Effective Demand for overcoats will fall off, while the Effective Demand for flannels will rise.

Again a sudden and unexpected spell of cold weather will cause a rise in the demand for (say) overcoats, without any fall in price—indeed the sudden increased demand may cause a rise in price. The same sudden cold snap may also cause a fall in the demand for flannels.

Now a rise in the demand for overcoats would also have been caused by a fall in their price. A fall in the demand for flannels would also have been caused by a rise in the price of flannels.

We can therefore say that an increase in the Effective Demand for a commodity may occur either, (1) because the commodity has become cheaper, or (2) because, in the opinion of buyers, the utility of the commodity has increased.

Similarly a fall in the Effective Demand for a commodity may be due (1) to a rise in price, or (2) to the fact that in the opinion of the consumer the commodity yields less utility than formerly.

The price of a commodity varies, too, according to its Scarcity and according to the Intensity of the Demand. Now we have seen that Costs are incurred by industrialists up to a certain point, because at the price then ruling there is a profit to be made by incurring them. The seller knows that by reducing the price of his commodity he will increase his sales. The question now arises: How far can he reduce it? He cannot reduce it below what it cost him to manufacture the commodity without making a loss. For his reward (that is his profits) consists in the difference between the price at which he sells the commodity and the price which he paid to manufacture it (together with the cost of keeping it, till it was wanted).

Now if the price of the commodity increases without any corresponding rise in the price which the manufacturer has to pay to manufacture it—then the amount of his profits will increase. Under competition, two results may possibly follow.

1. The manufacturer or the shopkeeper will be so elated at his increasing profits that he will try to sell more, in order to take advantage of the rise in price of his commodity. To manufacture more he will offer higher prices for the Factors of Production, that is he will pay more for

land, a higher interest for his capital, and a higher wage for his labour to secure their co-operation.

2. In addition, others, hearing of the large profits to be made in the industry, will themselves set up as manufacturers of the commodity and they too will therefore offer more for the Factors of Production.

By such methods the supply of the Factors of Production, that is the supply of labour, of capital, of land, will be diverted to producing those commodities whose price has risen.

Similarly the reverse would be true. If the Effective Demand for a commodity diminishes and as a result people offer a lower price for it, the consequences will extend right back. The manufacturer or seller will receive less profit; some may even go bankrupt; some may cease manufacturing. In all cases the result will be that the amount produced will be reduced.

It would, therefore, be true to say that a rise in the price of a commodity will ultimately bring about an increase in the amount produced and offered for sale. A fall in the price will cause a fall in the amount produced and offered for sale.

So far we have dealt with the various problems set up by Demand. But Demand is simply the obverse of Supply. Generally, if there is an effective demand for a commodity, it is supplied.

But, however, the Supply of a particular commodity, in so far as it represents the *Stock in existence*, has no very important influence on Price. What does matter is the Effective supply, that is the amount the sellers are putting on the market at a given price. Like Effective Demand, Effective Supply only has meaning when a price is stated.

The term Effective Supply now needs further explanation. An increase or decrease in the price of a commodity induces, we have seen, an increase or decrease in the supply of the commodity. But how rapidly can the supply react to the price?

For example: If there were a growing demand for pins and needles and the price rapidly increased, then the amount offered for sale, that is the Effective Supply, would be increased very rapidly. The Effective Supply would be highly Elastic.

If, however, the price of railway engines rose when the factories making these engines were already working to capacity, some time would elapse before a supply of more railway engines was put on the market. It would take time before the owners could equip new factories and before any competition could become effective. The Effective Supply would be Inelastic.

Similarly if the price of a commodity fell, it would take some time before the supply of that commodity was reduced. Suppose, for example, that the demand for books declined. The publishers and printers could not immediately apply their equipment (their land, labour and capital) to produce some other commodity. They might find it impossible to use their plant for any other purpose. Some publishers and printers might go bankrupt, some might stop publishing and printing. Others rather than receive no profit at all would continue production at lower profits. Of course, men would be dismissed; as the machinery wore out there would be no renewals—ultimately the output of books would slowly decline.

Commodities also differ, not alone in the Speed with which their supply reacts to changes in price, but also in the Degree with which they react. For example: a rise of (say) 25% in the price of one commodity may cause a very large increase in the Effective Supply or the amount produced of that product. An increase of the same proportion in the price of another commodity may bring about only a very small increase in the amount produced. The reasons for this difference are the varying natures of the industries. In some industries any expansion which may be due to a rise in price will be followed by increasing returns. In other industries the

rise in price will cause an expansion, but the increase will be very much slower. Still in other industries the returns may actually diminish.

Where the Effective Supply reacts easily in response to a rise or fall in price the Supply is Elastic.

Where any change in price brings about only a small response in supply the Supply is Inelastic. For example: if the price of bicycles rises as a consequence of an increased demand, the bicycle manufacturers will be encouraged to manufacture more. In addition the high prices and consequent high profits will encourage more manufacturers to enter the industry. The manufacturers will find with the larger output—owing to the advantages of large scale industry and the increased division of labour, that the cost of producing a single bicycle will grow less. Manufacturers will, therefore, have a double inducement to produce more. Prices have risen and therefore their profits increase, and in addition the more they produce the more the cost per unit decreases, so that profits will increase still further. The Elasticity of the Supply of bicycles will therefore be very high.

If, however, the price of bread rose, the farmers might indeed attempt to grow more corn, but they might find that the additional labour and capital needed to grow the greater supply would be so great, that a unit of product might not cost much less, and might even be higher than before (because of the operation of diminishing returns or because the farmer would have to resort to less fertile lands). The Effective Supply of corn is therefore Inelastic.

Many commodities, too, are produced jointly under conditions of Joint Supply—beef and hides, mutton and wool, wheat and straw, cotton and cotton seed. In such cases Costs cannot be determined separately. The cost to produce cotton seed (for oil cake for cattle) is the cost to produce cotton. The costs rise or fall together so that while the demand remains constant, if the cotton becomes cheaper so will the

cotton oil cake, because if the cheapness of the cotton has been due to its increased production, the production of cotton seed has automatically been increased too. With the increase of supply and the constant nature of demand the price will fall. The Elasticity of Supply of each product, produced under conditions of Joint Supply, is generally less than it would be if it were produced separately.

If the demand for one is more elastic than the demand for the other, then one price may vary more than the other, but both prices will move in the same direction. If however there is an entirely independent change in the demand, their prices may move in opposite directions. For example if more cattle are reared so that more oil cake is needed, then the price of oil cake will rise independently of what happens to the price of cotton. And if more cotton is grown to obtain the cotton oil, then the price of cotton will fall, because there has been an increase in the supply, while the demand has not altered.

Just as there is an alternative demand for such commodities as wool and cotton, so Supply is said to be Alternative when the same set of "factors" can be made to produce more than one class of commodities. Thus land can be used to grow wheat or barley, or to build upon. It will obviously be used to produce that which is most profitable.

There are lastly articles of Composite Supply and Demand. Demand is said to be Composite when a commodity is demanded for many purposes. For example, wood can be used to make furniture or to heat the house, steel can be used to make screws and battleships. In winter time, coal is needed for the household so that the price of coal goes up. If war breaks out, steel is wanted to make ships (less will be available to make nails and screws) so that the price of steel everywhere rises.

Supply is said to be Composite when the commodity can be produced from many quarters. For example, different firms produce worsteds, different transport systems supply the

service of conveyance. As however most Supply and Demand is of a Composite character these are not really special cases.

There is, however, one important exception—where a Monopoly exists, and a Monopoly can exist in demand as well as in supply.

No increase in the price offered can cause any increase in supply of Michael Angelos or of Van Dycks. On the whole, although to a smaller extent, the same would be true when the producer has a Monopoly—that is when the producer can control the selling price or the output. He may then decide not to increase the Supply of the commodity when the price goes up or decrease it when the price goes down. He may adjust his price and his output in such a way as to secure the maximum profit, and because he has a monopoly he has not to fear any competitor coming in to upset his calculations.

Now under conditions of free competition, it has been seen that Price is determined by the Marginal Cost of Production on the one hand, and by the Marginal Utility of the article on the other. How is Price determined under conditions of monopoly?

1. In those cases where the industry enjoys a legal monopoly—water, electricity, gas, even railways—competition we have seen is both uneconomic and impossible. In such cases the State has some voice in the control of prices. But how is price fixed in the case of monopolies in ordinary commodities?

2. If the demand for the commodity is inelastic, the monopolist will be able to raise the price without any great falling off in demand. If the demand for the commodity is elastic, then the monopolist will fear that if he raises his price there will be a serious fall in demand and therefore in his profits.

3. Again if the monopolist is producing under Increasing Returns, it will be advantageous to sell at a reduced price

because, first, at a reduced price the demand would be stimulated, and secondly, his larger output would enable him to take advantage of large scale production and of the economies of increasing division of labour. If the commodity is however produced under conditions of Diminishing Returns then it will not pay him to reduce the price—unless the demand expands so rapidly that it more than covers the increasing cost per unit.

Consequently we can say that the monopolist has one of two alternatives:

1. Either he can put on the market the amount he regards as remunerative and leave the price to be determined by the market.

2. Or, having set a minimum price on the article which will be decided by his cost of production, he can impose any price above that minimum and leave the amount to be demanded to be decided by the public. So that:—

1. If he fixes the price, the quantity to be supplied will be decided by the marginal buyer.

2. If he fixes the output, the price at which he sells will not be above the marginal demand price. So that we can say that the power of the monopolist is not absolute. He can fix either the price or the output but not both, and assuming that he had perfect knowledge of the market, the monopoly price is fixed at the point at which the largest net profit will be obtained.

Under normal conditions, then, Price acts as a kind of economic pointer, telling people which goods are wanted and which are not, and therefore which goods should be produced and which not. It also indicates how much should be produced at the price, that is which goods should be produced in greater quantities and which in smaller amounts. For if the price of the goods rises, then the Effective Demand for them will fall,

if the price falls then the Effective Demand will rise. Again, if the price of a commodity falls the Effective Supply of that commodity will shrink, while if the price rises the Effective Supply will expand.

Prices therefore adjust Supply to Demand and Demand to Supply. Consequently Prices perform two important economic functions.

1. They distribute the existing supply of commodities among those whose wants for these commodities are great and which are backed by an ability and a willingness to make the monetary sacrifice in order to have their wants satisfied.
2. They act as an indicator to producers, encouraging increases or provoking decreases in the total amount being produced. That is they guide the future adjustment of the supply of commodities and services.

Ultimately then the Price of a commodity tends to settle down at a level at which the Effective Supply of, and the Effective Demand for the commodity are equal.

CHAPTER IX

MONEY AND ITS FUNCTIONS

Nobody wants money for its own sake, except the miser who gloats over his hoard. We want money for what money will buy—to obtain goods and services to satisfy our wants. If every person were able himself to produce those goods and services he needed, very obviously he would need no money. But of course no man can. People specialise in production, and supply only one kind of commodity or service. Their product is first exchanged for money. The money is then exchanged for the goods and services needed. Could not then a person obtain what he wanted by exchanging his own surplus product for someone else's? Even this could not easily be done, for barter, or the direct exchange of goods, is both difficult and cumbrous. It would involve what is called "a double coincidence of wants." For example, a bootmaker who wanted bread would have to find a baker who not only wanted to barter bread, but to barter bread for boots.

When he had found him, he would have the further problem of deciding how many loaves a pair of boots was worth, for as any commodity might be exchanged for any other, it would be necessary to know the value of each commodity, in terms of every other.

This barter becomes even more difficult when, as in the modern world, no man makes a pair of boots or a loaf of bread. Each man does only a fraction of a task. How is the person who punched, say, the eyelets in the boots to exchange his surplus for the surplus of the man who looked after the machine kneading the dough?

It is obviously easier to find some common Medium, which

will exchange for all commodities. The machine-minder can sell his labour for that Medium. The eyelet-puncher can sell his labour for the same Medium. And as the Medium will be able to buy—that is to be exchanged for, any other commodity, exchange of effort does become possible. In addition, this Indirect Exchange has the further advantage that the Medium of Exchange can be divided and spread over the purchase of a great variety of goods. This Medium of Exchange is known as Money.

Now if everyone agreed to measure the value of their commodities and services in terms of money, it would then be easier to compare the value of one commodity with the value of another. It would also be easier to remember the values of different commodities. Money, already a Means of Exchange, thus also becomes a Unit of Value by which we can compare the values of goods and services, which are so different and varied as a visit to the theatre, a book, a gramophone and a railway ticket. The values so expressed in money terms are, of course, prices.

Without Money, then, there would be no specialisation, no division of labour, no scientific organisation of industry. Indeed a bad Monetary System would ruin the most technically perfect industry.

In countries advanced economically, too, contracts are made over long periods. Wage agreements may be made to last for years, insurance policies stretch over a number of years, even ordinary business transactions allow a period to elapse before payment. A unit is therefore needed which will have the same value in the future as at the time the transaction or contract is made. As Money has been found to serve this purpose too, it has become a Unit or Standard of Deferred Payment.

The last function of Money is to act as a Store of Wealth. A person wishing to conserve his wealth in some convenient form which will always be realisable and which will always constitute the power to demand, will find the Money

Medium the best for the purpose. For in what other form can he store the commodities and services he may require at some future date? So long as the Monetary System is in good order, a unit of money—say £1—will buy as much next year as this. To save the £1 is therefore equivalent to saving the commodities and services that the £1 will buy. It is obviously more convenient to hold and accumulate than goods which deteriorate and services which cannot by their nature be stored. For money gives the owner a freedom of choice in satisfying his wants, which a commodity can never give. Ten shillings and a ten-shilling book may be worth the same, but with the money he can buy any commodity or service that he may then need. It offers him therefore a kind of security in emergency, which a commodity can never do. In industry, too, it enables people to plan ahead, to meet unforeseen emergencies. It enables people easily to save for the future, for how could a man store boots and bread for his old age?

Money therefore represents a claim on commodities and services. Its possessors have the power to demand from society the goods and services which have been measured in money terms. Money can be regarded as a machine which eases the process of exchange, which enables specialisation and the division of labour to function. Money prices indicate to business men or entrepreneurs which goods are wanted and which goods should be produced. For economic society to live well, therefore, a good monetary system is essential.

Like most institutions of civilisation, our present monetary system has slowly developed. As soon as the necessity and the advantages of exchange were realised, peoples had to employ a Medium of Exchange, which soon became a Standard of Value, in order to facilitate the interchange of goods. So that a variety of materials has been used as Money by different peoples—salt, shells, cattle, tobacco, slaves, according to the civilisation and the economic standards of the time. Experience has ultimately decided in favour of the precious

metals. Although by no means a perfect Money Medium, the precious metals offer the best qualities necessary for a good money material.

They are compact and portable, they are durable, they are uniform, they are easily recognisable, they can be divided without loss of value. Above all they possess two special advantages which make them especially serviceable. First, on the whole they are not subject to vast changes in quantity and this keeps them fairly stable in value. Since the value of the money-material measures the value of all other materials, any alteration in the value of the money-material would affect the value of everything else. It is therefore essential that the money-material should be as stable in its value as possible, for otherwise the measurer of value would itself be no measure. If we want to measure length or weight or time there is a standard foot, a standard pound, a standard time, to act as the measurer. If these varied it would be impossible to measure them. Similarly, if the value of money varied; how could we measure the value of other things? Although the precious metals are not of unchanging value, yet they offer the most stable value at the moment.

Secondly, the money-material must have a utility of its own. It must be valuable apart from its capacity to serve as Money. It must have an intrinsic value of its own, so that it will be generally acceptable. Any commodity which everybody wants, that is, which is generally acceptable, can serve as a money-medium. Gold and silver stand out as pre-eminent. They are divisible without loss of value (compare cattle), they are durable (compare slaves)—it has been calculated that it would take 5000 years for a gold sovereign to wear out—they are malleable and can be stamped so as to be made recognisable, they are rustless, they can easily be minted into standard coin. In comparison with the world's stock of gold, the yearly output is calculated to be about 5%, so that the value of gold is comparatively stable. Both gold and silver are wanted for

their own utility, they are ornamental and decorative, and when needed they can be melted down and converted into coin. They are not too heavy to be portable (imagine a large payment in iron coin) or too valuable to be beyond the reach of daily needs (imagine diamonds being used as money). As a consequence, gold especially has ousted all earlier forms of money.

Recently there has been a further development of credit instruments and paper money, which apparently takes the place of gold, but which in fact represents gold. If gold is dropping out as an actual Means of Exchange it is still however the basis of calculation or the Standard of Value. For although paper money is in circulation, the paper *represents* gold and it is because it represents gold that the printed paper has any value at all—in themselves, as paper, notes are valueless.

Money is needed because it facilitates exchange. In order to help exchange still further, gold, silver, and copper are coined, that is a seal or mark is stamped on the metallic pieces to indicate the amount of metal they contain. These stamped pieces are called coins because they are stamped by a wedge-shaped punch or coign. The origin of the word money is obscure, although it is supposed that coined pieces of metal are so named after the temple of Juno Moneta in Rome, where in Classical times coin was minted.

In England there are a variety of coins in gold (since the War, gold has been withdrawn from circulation), silver, and copper and in addition there are various forms of paper money such as Currency Notes, Bank Notes, Cheques, and Bills of Exchange. The exact function of the State in economic matters may be subject to keen controversy, but probably most will agree that the State should regulate and control contracts. A sale can be regarded as a voluntary agreement to exchange money for goods; it is in fact a contract of exchange and is therefore State-regulated. Consequently the State regulates

the coinage of the realm.

To facilitate exchange still further, the State selects one commodity (or more) as its Standard Money and makes it standard by giving it the quality of full Legal Tender. In England gold is full legal tender—when it is offered, it must be accepted in settlement of any debt, for any amount. For smaller transactions, subsidiary coins are issued of silver and copper which are not legal tender to any amount. These are merely Token Coins—they only represent Standard Money; they act as a substitute for gold in small transactions.

The State has monopolised the right of coinage and regularised the whole monetary system. Imagine the obstruction to exchange if every county in England had its own coinage. A uniform system gives cohesion to an area and facilitates exchange within that area. The English State adopted the Gold Sovereign (when gold coins were current) as the Standard Coin. It has arranged that its value as metal and its value as a coin should always be equal. A currency which is so arranged as to keep the value of the chief unit of money equal in value to a fixed amount of gold is called a Gold Standard Currency. In England it was fixed that the Gold Sovereign was to weigh 123.2 grains of standard gold, 11/12 fine or 22 carats fine. Half-sovereigns were to weigh exactly half. In order to maintain the value of a gold coin at its value as bullion (that is, as metal) the Government allows the coinage of gold to be free and gratuitous. Any amount of gold bullion can be taken to the Mint and there coined into gold coins free. (Where a charge is made to cover the cost of coinage it is called Mintage or Brassage. If the State takes a toll on all coinage by putting less than the amount of metal in the coin, it is called Seigniorage.)

Prior to the war anyone who had gold could get it minted at the Royal Mint at the rate of £3 17s. 10½d. per ounce of gold. In practice however—to prevent the person waiting for the minting to be done, the owner of gold took it to the Bank of

England where he obtained in cash £3 17s. 9d. per ounce of gold. The small difference of 1½d. was not a charge for coinage; it was made up by the saving of time taken in the process of minting and can be regarded as interest for the period that the waiting would last.

Token coins of silver and copper help the transactions of the everyday-shopping of the ordinary man and woman. On this coinage, the mint makes a large profit; for their actual value as money is far higher than their value as metal. Obviously free coinage cannot be granted to the metals used as Token Coinage; for then the mint would in fact be giving the owners the difference between the face value (that is the value as money) and the metallic value of the coin. For example, if silver were given free coinage, then if 6d. worth of silver were contained in a shilling, the owner would gain 6d. on every coin. The value of a silver or copper coin cannot fall below the value of the metal each contains, for if the monetary value were lower than its value as bullion, it would pay people to melt them down and sell them as bullion. They are maintained at their coin value by the Government, which restricts their issue. The Government then limits the issue of all Token coins as well as the amount which must be accepted as legal tender. While gold is legal tender to any amount, silver is legal tender only to 40s., and copper to 12d.

The State of course cannot compel people to accept its money. If the currency issued by the State and given the quality of legal tender is not generally acceptable, then the money ceases to perform its function of facilitating exchange and may even hinder commerce. In England, the State has chosen Gold for Gold is generally acceptable, because of its intrinsic utility apart from its monetary value.

A currency which has only one Standard of Value is called a Mono-metallic Currency. It is only since 1816 however that England gave up her two standards of value, gold and silver. In 1816 England "demonetised" silver, that is withdrew silver

from being full legal tender and from the right of free coinage. All the chief commercial countries have followed suit and have given up their Bi-Metallic currencies.

The reason becomes clear when a Bi-Metallic currency is examined. In 1696 there took place the Great Recoinage; the Government then issued a double coinage of guineas and shillings, both being full legal tender and both metals enjoying the right of free coinage. At that time, one ounce of gold was worth as metal 15.93 ozs. of silver. The mint tried to keep the Mint Rate at the same proportion as the Bullion Rate (that is, their proportionate metallic value) by coining one ounce of gold into the same amount of money as 15.93 ozs. of silver. This gave the guinea the value of 22 shillings. The value of both coins, as money, was the same as their value as metal. The Mint Rate and the Bullion Rate were identical.

Gradually however the production of Gold increased faster than that of silver; then the production of silver increased faster than that of gold. In both cases, the value of the two metals changed. Had the Mint constantly varied the Money or face value of the coin, to agree with its value as metal or bullion, then gold and silver would have circulated together. But the Mint did not. If silver increased in value as metal, while the Mint Ratio remained the same, then it paid people to melt down their silver coins, sell the metal in the bullion market for gold, have the gold coined free at the mint and so gain on every such transaction. The reverse held true when gold increased in value. In 1816 the Government therefore stopped the free coinage of silver, and put the coinage on a Mono-Metallic basis.

The controversy between the advocates of the two schools, between the Bi-Metallists and the Mono-Metallists, has not ceased." The Bi-Metallists argue that (1) the joint production of gold and silver is more constant than that of either gold or silver singly, so that a joint standard would be more stable than a single standard, (2) that the double standard would

provide a "compensatory action," whereby a tendency of prices to rise or fall, if based on one metal alone, would be checked by the retarding action of the other metal, (3) that the gold supply for a Mono-Metallic world currency is insufficient, so that if silver were also used, then silver-using countries like China and India would benefit by having a basis of exchange.

The Mono-Metallist replies (1) That the fluctuating Bullion Ratios of the two metals would necessitate constant changes in the mint rate, so that although two metals might be nominally current, in fact the over-valued metal would be driven out of currency (for it would be worth more as metal than as money) so that actually the country would be on a mono-metallic basis, (2) that the actual standard of value would be the metal which the mint over-valued. The country's Monetary system needs reforming, but not on the lines of Bi-Metallism.

The fact that the over-valued metal would tend to disappear from circulation, if two metals were minted as standard money, well illustrates Gresham's Law. Sir Thomas Gresham was the financial adviser of Queen Elizabeth and the founder of the Royal Exchange, and his Law (it had in fact been stated earlier by Nicholas Oresme in 1373) states that "Bad money drives out Good" (from circulation). For example if cattle were the money-medium of a primitive agricultural community, then in any transaction the cattle offered in exchange would always be the worst—the good cattle would be retained for personal use. The bad cattle would drive the good cattle out of circulation.

Similarly in a country using metal currencies, the good coins would be hoarded, the bad ones passed on—that is put into circulation. By the bad coin is meant not alone the counterfeited coins but the coins under-valued by the mint. In the country itself, where both good and bad coins might be legal tender (where a Bi-Metallic currency was in operation), the bad coins would be used to pay debts, while the good ones

would be retained. But for foreign commerce, the foreign merchant would not accept the bad ones at all, so that the good money would be driven out of circulation by being used to pay foreign debts.

When Gresham's Law was first formulated it was used to explain the stupidity of debasing the coinage; for the debased coins would drive the good coins out of circulation. But as the principle is sound, the Law applies equally well when coins of two different metals circulate and the market or bullion rate differs from the mint rate, also when good and bad coins of the same metal circulate together as legal tender (and equally when an inconvertible paper currency is circulating together with standard coins).

It is also true that the evil consequences of having bad coins or bad money in circulation may become so serious that ultimately good money has to be re-introduced to drive out the bad. So that it can be said that Gresham's Law only operates till that change takes place—that is over a short period. Over a long period then Gresham's Law will not apply.

Paper money is a substitute for Metallic money. Paper money is accepted because it does the work of gold, which is the commodity in which all values are calculated. It is a kind of token money and is acceptable by common consent, for it economises the use of gold. If a gold sovereign were lost both the loser and the community would lose so much wealth. If a pound note were lost the loser alone would suffer for the note only *represents* gold. If a Currency Note, for example, were destroyed the State would actually gain, for the obligation of the Government to meet the note would be cancelled. If a Bank of England note were destroyed, it would mean a gift to the shareholders of the Bank, for the Bank of England note represents gold with the Bank. These cases indicate the variety of paper money.* First, there may be Inconvertible Paper Money; it is issued by the government with a statement that each piece of paper so printed is so much money. Occa-

sionally there may be added a statement that payment in coin will ultimately be made, but the promise is vague and indefinite. Generally such paper money is issued by the government to pay its debts. It circulates by law of the land. The government creditors are forced to accept it, and they are authorised to settle their debts with it. Such paper money may for a time perform the services of good money inside the area in which the government has authority, but of course foreign creditors will not accept—what are bits of paper. In the long run, too, the government itself gains nothing, for the paper comes back in payment of taxes. It is extremely difficult to calculate how much may be needed, and consequently it is easy to over-issue, for the only cost is the printing of paper. It is therefore an *inelastic* currency, for while it can be rapidly extended it is not easily reduced. As the supply is increased—because it is plentiful, it must fall in value, it must depreciate, and by Gresham's Law it will drive good money out of circulation. It therefore introduces uncertainty into commerce, and hinders rather than helps, (what should be the main function of money), exchange. Over-issue, which generally follows, is recognised first, by the disappearance of gold (by the operation of Gresham's Law); secondly, by a premium on gold, for foreign creditors will accept payment only in gold and home creditors will prefer gold; thirdly, it will lead to a rise in prices; fourthly, it will result in an adverse foreign-exchange; and, lastly, it may even result in two prices for goods, gold-prices and paper-prices. Only governments in difficulty, then, will issue Inconvertible Paper Money.

Secondly, there may be Convertible Paper Money, where the Government or the Bank keeps a cent-per-cent reserve—for every paper £1 note issued, there is a gold £1 kept in the vaults. The owner of the note can demand gold for the note-value and has the right to receive it on demand. Such paper simply economises the use of gold, and there is consequently

perfect trust in such paper-money by national and foreign creditors. Bank of England notes, with the exception of £19¼ millions "fiduciary" issue, were of such a character, prior to the Act of 1928.

There is a third type of paper money—Fiduciary Paper-Money—that is Paper Money accepted on trust and depending for its value on public confidence. Here there is a promise to pay in gold, but the promise is not backed by a cent-per-cent reserve of gold, but rather by a faith in the government issuing such money. Currency notes came under this heading, nearly the whole issue being fiduciary. The gold backing was small, but the notes were legally supposed to be convertible. At present there are practically no gold coins circulating in England.

On the whole, it is conceivable that a well regulated paper currency would have an advantage over gold, for it would substitute a cheap for an expensive material and save the cost of minting. The currency might be of paper, but because it would be convertible into gold, the Gold Standard would be retained.

A fourth type of note is a Government or Bank Note, where the note is a promise to pay gold on demand, but a cent-per-cent reserve of gold is not kept to meet the demand. Some reserve, however, is kept and the Government or the Bank learns by experience that all notes will not be presented for payment at the same time, and what cash reserve to keep in order to pay those which may be presented. The risk of this paper money is that notes for an amount greater than the cash reserve may be presented at the same time.

There are two further types of paper money. Because any further issue of Bank of England notes was hindered by the Bank Charter Act of 1844, the cheque has grown and almost replaced the Bank note as the chief form of paper currency. Lastly, and mainly for International Trade, the Draft or Bill of Exchange adequately replaces metallic money.

CHAPTER X

MONEY AND THE LEVEL OF PRICES

If a pair of boots costs £1, then what is the cost of £1? The answer is obscured by the fact that £1 is the standard of value, as well as a certain weight of gold, which has value as a metal. In this case the cost of £1 is a pair of boots. The value of money in other words is what money will buy. If the value of a book is 5s., then the value of 5s. is the book.

So that, if we knew the prices of all commodities and services, we could say that they equal the value of the money in circulation. But the prices of some things rise, whilst the prices of other things fall. How can we then find the average price ruling or the general level of prices?

A price, we have seen, is the amount of money for which a commodity or service will exchange in the market. If the price of anything rises, it means that its value has risen, that we can get in exchange for it more of other commodities than we could get before. If the price of any commodity falls, then we can get in exchange for it less of other commodities.

If however the price rises, and yet it will not exchange for more of other commodities, or if the price falls, and it will not exchange for less of other commodities, it means that most other commodities have either risen or fallen in price at the same time. In other words a change in price has taken place but not a change in value. The only cause then must be, that the *value* of money has changed, or what is the same, that the purchasing power of money has changed.

Suppose for example that a pair of boots costs £1 and that a suit of clothes costs £3, but that after a lapse of time, it is found that a similar pair of boots costs £2 and that a similar

suit of clothes costs £6; it would be true to assume that the value of boots and clothes has not changed but that the value of money had. Those people who had been living on a fixed income would, of course, find themselves far poorer if the price of commodities were so doubled. (There has been a rise in the cost of living.)

It might, however, be that while the price of boots and clothes was doubled, the price of (say) food was halved—in which case the position of those living on fixed incomes and wages would be much the same, for the *value* of money then would not really have altered.

How then can one find the value of money, or—what is the same—the General Level of Prices? How can one find out whether there has been a rise or fall in the cost of living? The method adopted is by constructing an Index Number. A large number (the larger the better) of representative articles are taken and their prices noted in a particular year. If the prices of the same goods are noted over a period of years, then the fluctuations in price will indicate the changes in the value or the purchasing power of money.

Suppose for example that the price of goods were taken for the year 1900 and then for every year till 1930. The year 1900 would be taken as the Basic Year and the Index Number for that year would be indicated by the number 100. If the general level of prices rose by 10% in 1901 the Index Number for that year would be 110, if the level of prices fell by 10% then the Index Number would be 90.

Different methods are adopted in order to obtain the Index Numbers. There are Broadstreet's System, Sauerbeck's Method, those followed by the Board of Trade and the Ministry of Labour, and those constructed by such periodicals as the *Economist* and the *Statist*. The principle is much the same in all cases. It can be readily understood that to those whose wages are based on a Cost of Living Index it is a matter of great concern that it should be as accurate as possible.

In the construction of the Index Number, therefore, a large number of commodities are taken (ideally, of course, the price of services, that of the doctor for example, should be taken too). Generally wholesale prices are taken because calculations are easily based on these, for retail prices are more variable, differing from area to area. (It is contended however that a fall in wholesale prices may take place and that time may elapse before it is reflected in retail prices.) For the similar reason, that calculation is rendered simpler, the price of raw material is taken (though it is possible that a fall in the price of raw material may take place and a long period elapse before it is passed on to the manufactured goods). The commodities chosen are planned so as to represent as many varied types of product as possible, for a preponderance of either foodstuffs or of manufactured articles would distort the result. Lastly, some commodities are recognised to be more important than others in the construction of an Index Number. Let us take, for example, the case of milk and petrol. If the price of a gallon of milk is 2s., and the price of a gallon of petrol is 3s.; and with lapse of time the price of milk rises to 3s. and the price of petrol falls to 1s. 6d., if a simple average were taken for our Index Number, then in the first period or basic period,

Milk	would be represented by	100
Petrol	„ „ „	by 100

So that the average Index Number would be 100.

In the second period,

Milk	would be represented by	150
	(having risen in price from 2s. to 3s.)	
Petrol	would be represented by	50
	(having fallen in price from 3s. to 1s. 6d.)	

So that the average Index Number is still 100, which would be taken to mean that the Price Level had remained unchanged and that there had been no depreciation in the value of money.

Every housewife would challenge such a conclusion. In order to indicate the greater importance of milk, therefore, the price of milk would be *weighted* in the construction of the Index Number. If milk and petrol were consumed in the proportion of say 10 to 1, that is, if milk were considered ten times more important than petrol, in the average family budget, then the weighted table would be

Milk (weighted ten times)	1000
Petrol	100
Average of 11 units	100

At the changed prices,

Milk (weighted ten times)	1500
Petrol	50
Average price of 11 units	140 (approx.)

So that the weighted Index Number for milk and petrol would be 140, which would indicate that prices had risen by about 40%, which would be a truer picture of fact; for it would indicate real changes in the purchasing power of money. Whereas the *crude* index number, reached without weighting, showed no rise in prices at all, the *weighted* index number gave a rise of 40%.

No Index Number Table is perfect. The articles chosen may be too limited, the fact that wholesale prices are taken may give an untrue picture, as well as the fact that prices of raw material are taken and not those of finished goods. Goods moreover vary in quality and this too cannot often be shown on the table. Very often the cost of services is omitted, as well as, for example, the cost of travelling and amusement.

But in spite of these difficulties the Index Number Table does indicate a scientific attempt to study and analyse the rise and fall of prices and it helps the investigation of such problems as whether the standard of life has risen or fallen over a lapse of years, or the problem, which otherwise would be

almost baffling, of a comparison between the standard of life in different countries.

Are we better off than our grandparents? Is the standard of life in England higher than in, let us say, America? The only method of approach we have to such problems is through a study of Index Numbers. The *Nominal* wages may have been lower in 1830 than in 1930, the *Nominal* wage may be higher in America than in England. But the nominal wage by itself is no answer to these problems. For what does matter, is not what people earn, but what they can buy with their earnings. The Index Number enables us to estimate the *Real* Wage, so that we are able to compare the Real Wages over a period of years and between different countries.

Even if the Index Number were perfect there would still be difficulties in answering these problems scientifically. For example, it is obvious that a poor man will take little interest in the price of motor cars or of furs or of diamonds, whereas he will be vitally concerned with the cost of his food and of his rent. Logically therefore different Index Numbers are needed for different sections of the population, each based on the principal articles of consumption in each of these sections. It might then be possible to say with greater accuracy whether the labouring classes are now better off than they were a century ago, or whether they are better off in England than in America, or in France.

Again, over very long periods, even such comparisons are not very helpful. For example, if we tried to compare the cost of living in 1930 with that of 1830, although the same commodities were taken from which to construct the Index Number, yet a comparison would be difficult. For if (say) cloth were included the two cloths would be different. Some articles, too, never existed then, which now enter into the budget of even the poorest—wireless, the cinema, railway travelling. In addition the extension of the Social Services since 1830—free education, the sanitary services, unemployment

insurance, would not be recorded in the Index Number and this omission would render the comparison inaccurate.

Lastly, if the Index Number were made the basis of comparison between the Cost of Living of two different countries, then there would arise the very obvious difficulties that climate and custom and tradition influence the Standard of Life very deeply. In England even the poorest live in brick-built houses, even the well-to-do Egyptian peasant lives in a mud and wattle hut. In France wine enters into the budget of the very poor, in England only the well-to-do can afford it. Clothing will differ in India from the dress of Canada.

The more uniform, however, the world becomes the more accurate a picture will the Index Number give. The question now arises—What causes these movements in the Price Level? Why does the Cost of Living rise and fall at all?

When the same amount of money will buy more goods and services obviously money is worth more. We say that money has *appreciated*. When the same amount of money buys less, then money is worth less, and money has *depreciated*. What causes this appreciation and depreciation of money? The most important quality of a good monetary system is that it should keep the general level of prices fairly steady. For the consequences of an erratic price level gravely disturb the economic system.

The problem can be simplified by imagining our Robinson Crusoe Island now peopled by ten inhabitants. In addition, let us assume that each person inhabiting the island produces one unit of "economic goods" and that a money system exists on the island of (say) £10. Because there are £10 in circulation and ten units of that vague term "economic goods" are produced, the average price of a unit of goods must be £1. Now if the inhabitants work harder and produce two units of goods each; then, because there will be twenty units of goods produced on the island and £10 in circulation, the average price of a unit of goods must be 10s. In other words

prices will fall as production is increased. (All other factors being equal.)

Again if production falls off and each person now produces half a unit of goods; then there will be five units of goods produced on the island and £10 in circulation, so that each unit of goods will now cost £2. As production decreases then prices will rise, each unit of goods costs more.

It is obvious then that the price of goods will depend on the amount of goods produced (the amount of money in circulation being constant).

Similarly if a gold mine were discovered, so that the amount of money in circulation were increased say to £20. Then if the amount of goods produced were still ten units, the price of each unit would rise to £2. That is, the price of a unit of goods will vary directly with the amount of money in circulation. If ten units of goods are produced when £10 is in circulation; each unit will cost on the average £1; when £20 is in circulation each unit will cost £2. If the amount of money in circulation falls to £5 then the price of a unit of goods will be 10s.

The amount of money on the island could be increased, not alone by the discovery of a gold mine and the minting of the gold, but also by the issue of paper money. Any increase of money, whether paper money or metallic money, would have similar consequences. The Price Level will depend on the amount of all the money in circulation.

There is still a further factor to be considered. If the inhabitants were exceedingly careful in their purchases and each spent say 10s. and locked up 10s. in a safe, this would in fact amount to the withdrawal of half the available money from circulation and prices would fall. And again if each spent the 10s. and the money, after changing hands once were locked up (say) for a month, then, that too would mean the slowing down of the circulation of money. This would amount to the withdrawal of so much from circulation and prices would

again fall. If, however, the receiver of the coin immediately spent it and the coin changed hands (say) once a day for the month, then the effect would be, that the circulation of money being more rapid, the coinage could be regarded as having increased thirty times.

Imagine, for example, a train service between London and Dover. If the railway company found that ten trains travelling at twenty-five miles an hour sufficed, then if the company increased the speed to fifty miles an hour, only five trains would be necessary. For as the speed is increased, each train can hurry back and carry goods and passengers for which otherwise another train might be needed. The greater the velocity of the trains the fewer trains are needed. If buses in London were made to travel faster then fewer buses would be needed. So on the Robinson Crusoe Island. If each £1 does ten transactions a day, then fewer coins are needed than if the coin passes from hand to hand only five times a day. Prices have therefore a direct relation to the velocity of circulation of the coins.

This relation between the Price of goods, the Quantity of goods, the Quantity of money in circulation, and the Velocity of circulation of the money is expressed as an equation known as the Equation of Exchange. If M represents the amount of Money, V the amount of times the money changes hands, or its velocity, P the price of each unit of goods and G the amount of goods sold then,

$$M V = G P.$$

That the Level of Prices will depend on the amount of money in circulation is the simplest expression of the Quantity Theory of Money.

Like so many theories it represents a truism. For the amount of money in circulation (M), multiplied by the average number of times each coin is used (in any given period) (V), must equal the amount of money spent by buyers. And the amount of goods sold (G), multiplied by the average price

paid (P), must equal the amount of money received by the sellers—which must again equal the amount of money spent by the buyers.

In actual life, the Velocity of circulation will of course depend greatly on people's habits. In holiday periods the velocity of circulation will be rapid, for people accumulate money to spend during these periods. If people are extravagant and thriftless the velocity of circulation increases and prices rise. When people dwell together closely, the velocity of circulation of money will be greater than when population is scattered. When people fear that there will be a fall in the value of money, they spend more rapidly (it is little use saving the money, if it will buy less). Lastly the Banking System has influenced the velocity and therefore prices. People who are wealthy enough keep a banking account and pay their bills by drawing a cheque (that is, they write an instruction to their bank to pay over the sum named to the person to whom they owe it). The receiver of the cheque generally puts it back into the bank, so that the banks really economise the use of money. The bank provides its customers with small cash and pocket-money and to employers it supplies the wages they have to pay out to their employees. But if the wages are paid on (say) Saturday, the men and their wives spend it by paying their weekly bills to the baker or greengrocer or on rent; so that by Monday morning, these receivers of the men's wages take them back to the bank. The banks need therefore keep in their vaults but a very small proportion of the amount they owe. A great deal they lend to those in need of money, but rarely do they hand over coin except for small cash and for wages. They allow the borrower to draw cheques to the amount lent. So that the more cheques used the greater the velocity of money.

The Quantity Theory of Money therefore states that in any community the Level of Prices depends on the Volume of Trade, the Quantity of Currency (this includes the amount of

paper money), and the Velocity of Circulation (of all the forms of money in the community).*

As a consequence of the Great War, many governments who were unable or unwilling to finance the war and its consequences by taxation or borrowing resorted, in order to meet their difficulties, to printing paper money. Now, any such action would interfere with the efficiency of the productive system. The new paper money went first of all to those to whom the government owed money—army contractors, civil servants, soldiers, munition workers and holders of government loans. From these, the paper money would go to the tradesmen with whom they dealt, and ultimately to the whole country.

At every stage, the additional money would raise prices (because there was more money in circulation) but as the government issued the money it was very profitable—to itself—because it paid its debts in paper whilst in fact it wrought havoc to the country.

For example, when a business man (or entrepreneur) borrows money (on which he promises to pay interest) to buy machinery; when he engages workmen at wages and salaries; when he buys raw material and builds a factory, he does so because he calculates that at the price then ruling for the finished commodity, he will be able to sell his product at a profit. If however (through governmental issue of paper money) the value of money falls and prices rise, he will receive a still higher profit, because his goods will sell for even a higher price than he expected. His workers and those who lent him money (because their returns were the result of a contract) will, however, be receiving the same rate as before. But as money will now buy less, interest and wages have really been reduced. The business man finds his stock increasing in value and his profits rising whilst his fixed charges—such as rent, interest and wages—are not.

Now every business man follows the Price Index and en-

couraged by the higher price of his product and his increasing profits, he will take it to mean that his goods are in great demand. He will therefore expand his production. Competitors too will enter the field—all following the false indication of the artificially created higher prices. This will cause a very active period of trade. The workers lose of course in having their *real* wages lowered (although the *nominal* wage will remain the same) but they may gain by continuous employment and soon, too, those organised in Trade Unions will demand increased wage rates to meet the rise in prices. The business man, in his optimistic mood and because trade is active and because he wants to secure all the advantages of high prices, will be the more likely to agree to a rise in wages. Those who have lent money to the business man at a fixed rate of interest find their money returns buying less and less, as do the landlords who receive a fixed rent for loaning their property, and the professional people whose incomes are fixed by contract. Ultimately too the Government is affected. What it gains in the first instance it ultimately loses. Taxation of course is paid in paper money (that is in the Inflated Currency) which has been made legal tender by the government. But the income from taxation dwindles constantly *in terms of goods*, for the taxes buy less and less as the paper money increases. In addition, taxes can never be imposed fast enough to be really effective. In fact, all that this Inflation has done has been to take money from almost every one and give it to the business man (and, of course, shareholders in business concerns).

Even business men ultimately suffer. Their new income, in inflated currency, is large (but in terms of goods, it is not nearly as large), and it leads them to expand more than is, in fact, economically sound. New competitors enter their markets and so competition becomes more severe.

How long can the government continue to inflate its currency? Internally it has led, we have seen, to economic chaos.

People do not know what their wages are going to buy. Those with fixed incomes are reduced to poverty. Savings have dwindled away. Those who have insured against old age find their policies worthless in terms of goods. And the government receives a diminishing *real* income from its revenues and taxation. In addition foreign trade is paralysed, for foreign merchants will not accept paper as money. Foreign exchanges collapse. To obtain foreign goods at all, merchants may have to revert to barter.

The government, then, to check this economic chaos which may even lead to political upheaval, is forced to stabilise the currency—that is to Deflate. This involves withdrawing the amount of paper money in circulation. Now the economic effects are reversed. The price paid for raw material, the amount of wages, of salaries, of interest on loans, have all been settled when money was of low value (that is when prices were high). As money now begins to increase in value, the price of goods falls and the profits of business decline. Those who now gain are those who have lent money or property at a fixed rate of interest or at fixed returns, when money was still inflated. Some workers may gain too, those whose wages are not reduced as fast as prices fall. But the lower prices and the consequent reduced profits, and in many cases the losses of business men, cause them to cut down production. Some business men produce less, some (probably the newcomers into business during the period of inflation) go bankrupt. Consequently, working folk are now thrown out of work, there is widespread depression, and labour unrest increases as wages are reduced.

It is obvious then that a stable currency, both in the short run and in the long run, is of the greatest economic advantage to the community. Economic society has now become such a delicate piece of mechanism that it only functions well under security, and the Monetary Policy of a community will profoundly influence its economic well-being.

CHAPTER XI

BANKING AND CREDIT

SECTION A.

MONEY, we have seen, consists of two kinds: **Metallic Money** and **Paper Money**. **Metallic Money** includes gold, silver and copper coins, of which gold coins are legal tender to any amount, while silver and copper coins are token money. In England, gold has disappeared from circulation and has been replaced by Notes.

By far the largest amount of money in circulation consists of **Paper Money**. Payments for all large transactions are in paper. The business men of the world must have very great confidence in each other to accept paper for goods. What then is this paper money? How did it originate? Why is it accepted?

Its story forms part of the general development of the evolution of money. Till the seventeenth century, the wealthier sections in England, landlords and business men who had any surplus money, were in difficulties where to keep it. Some hid their wealth in their gardens. Samuel Pepys in 1664, so he records in his diary, chartered a hackney carriage in order to carry his money out into the country, and there bury it. Gradually the practice grew up of "taking coach and four" to London and depositing it for safety with the Goldsmiths. These craftsmen and merchants already dealt with a costly material; they had their own strong rooms and watchmen. Their money was obviously safe. The Goldsmiths gave a receipt for the money deposited and, of course, charged for looking after it. Now, when these depositors wanted to withdraw part or the whole

of their money to pay their debts or to transact any other business, they could of course go to the Goldsmiths and withdraw cash. The simpler and safer method, however, would be for them not to pay in money, but with the receipt. If the goldsmith were well known and his trustworthiness beyond doubt, the receipt would be the equivalent of the money.

If by chance the creditor had also put his money into the charge of the same goldsmith, he would merely add the receipt to his account, and the whole transaction would be thus completed without any money changing hands, but simply by a series of book entries by the goldsmith. Such was the origin of the modern Banking System; the Goldsmiths were the fore-runners of the modern bankers.

The goldsmiths saw their strong room full of money. As they issued a number of small receipts (instead of one large receipt) to each depositor for the amount deposited, they facilitated even small payments with their receipts. They profited from the charges they made from each depositor for safeguarding his money. Commercial transactions became more secure, for there was little risk of the money being lost or stolen and the goldsmiths were gradually changing from their original craft to become bankers.

But a further development took place. There were, and are, always people wishing to borrow money (to tide them over a difficulty, to start a new business, or to extend an old one). The goldsmith with his hoard in his vaults was the obvious person to turn to. Against very good security, he would lend the money that had been deposited with him (which was lying idle in his vaults) and charge, of course, very good interest. He might hand over to the borrower actual coin or he might give him what had become quite as good as coin, a Receipt for the money he promised to lend. All would go well until by some unlucky chance there was a general and urgent demand for ready cash and all (both depositors and borrowers) presented their receipts at the same

time. If such a catastrophe happened, the goldsmith would go bankrupt. On the whole, he learnt by experience that the confidence of the commercial classes in each other and in himself made such an occurrence not too frequent. So that, for the day to day demand for cash he would keep but a Reserve of cash—the amount of the reserve he had to learn by experience.

Gradually his lending department became so lucrative that not only did he forgo charging the depositors for safeguarding their wealth, but he actually paid them for doing it. He would of course pay them less than he charged those borrowing from him. The difference between what he paid Depositors and what he charged Borrowers constituted his profits. The modern bank has shed its goldsmiths' business and has specialised in this receiving and loaning of money. The old Receipts have become the modern Bank Notes.

In the later eighteenth and the early nineteenth centuries so many people were attracted by the apparent simplicity of banking and the high profits, that many mushroom banks started up and bankruptcies were frequent. Every bankruptcy meant not alone the failure of the banker but hardship to the depositors and borrowers. Commercial life became very insecure so that the Government in 1844 passed the Bank Charter Act to regularise banking.

As the provisions of this Act are still the corner-stone of the English banking system, they are of extreme importance.

- (1). It forbade the establishment of any new note issuing bank. If any of the existing banks became bankrupt or opened up in the London area, then they lost the right of issuing bank notes.
- (2). All future issues of existing banks were limited to the average circulation for a short period prior to 1844.
- (3). All existing banks of issue were to publish a weekly return.

The Act specially regulated the Bank of England. The Bank of England had been founded in 1694. It received a special Charter of Incorporation from the government and became the Government's banker. There was a controversy raging at the time, in 1844, round Banking Theory. One set of opinion, the Banking School, contended that every banker should have the right of issuing notes at his discretion and that he should not be restricted by the actual gold reserve. For it was argued that many a man who might want to borrow for quite legitimate productive purposes would find himself obstructed by the bank's necessity of a legal reserve—that enterprise should not be handicapped but rather encouraged, and that with care, a note issue could be perfectly convertible into cash, even if there were not a 100% reserve.

Their opponents, the Currency School, contended that the Banking School wished to place too great a reliance on the bankers, that they ignored the experience of the many bank failures, where the bankers had been given responsibility. They argued that a bank note was not a credit instrument but simply an economic substitute for gold. They recommended that the note issue of the Bank of England should be strictly regulated by the amount of gold held.

The Currency School won the day and the Act gave legislative effect to their proposals. (The main criticisms against their recommendations were that the note issue would become far too rigid and inelastic, that business enterprise might be injured if the Bank withheld loans, and that in the event of a temporary shortage of gold, grave difficulties would be experienced.)

Consequently the Bank of England was and is by law divided into two departments, the Issue Department and the Banking Department. The Act further stated that,

1. All Bank of England notes were to have 100% gold

backing with the exception of a small Fiduciary Issue of 14 million pounds.

2. The Issue Department was to give notes for gold at the rate of £3 17s. 9d. per ounce.

3. If a country bank should cease issuing notes, then the Bank of England could increase the Fiduciary Issue by two-thirds of the lapsed note issue.

The Act in fact gave the Bank of England a monopoly of the right to issue bank-notes. The criticism of the Banking School has proved valid, so that whenever a financial crisis is feared an Act is rushed through Parliament giving the Bank of England the right to issue notes unbacked by gold. The Suspension of the Bank Act, as it is called, usually allays the threatened financial crisis.

Another result followed. As the restriction of Note Issue tended to limit the credit facilities offered by other Joint-Stock Banks, the cheque replaced the bank note as the chief medium of paper currency. An over-issue of cheques might of course be as dangerous as an over-issue of bank-notes.

To-day, therefore, if Mr. Jones has bought goods to the value of £100 from Mr. Brown, he can pay him in a variety of ways. He may give him £100 in gold, or a £100 Bank of England note (or till 1928 £100 in Currency notes), or he may give him a cheque for £100, or he may accept a three months' Bill of Exchange drawn on him by Mr. Brown for £100.

In the first three cases, there has been a cash payment made, and no credit has been given. Credit is given when Mr. Jones pays by cheque or when he accepts a Bill of Exchange. If his banking account is at all in doubt his cheque will not be accepted and he may have to go to the Bank himself, to withdraw £100 and pay his debt. The acceptance of his cheque therefore implies confidence in his capacity to pay. If for any reason confidence is lacking, there will be a demand for gold or notes which would otherwise not be needed. Credit in this case economises the use of cash or notes.

In the case in which Mr. Jones accepts a Bill of Exchange, there is not only a confidence in his ability to pay but also a willingness to make him a loan for £100 for three months. If Mr. Brown is not willing to make him a loan then he will accept a cheque. In both cases there is no demand for cash or notes. Credit economises the use of money.

Now how does Mr. Jones obtain the right of drawing cheques for this £100? He can do so by depositing £100 in cash with a particular bank, let us say the Westminster. He is then given a cheque book and he can write cheques to the amount of his deposit. But he can also obtain this right by going to the Westminster Bank and *borrowing* £100 (on security of course and by offering to pay interest). He could accept the £100 in cash. Generally, he does not take the amount he borrowed in cash; he receives a cheque book with the promise that the bank will pay any of his cheques up to the amount he borrowed.

So Mr. Jones can pay by cheque whether he actually *deposited* money with the bank or whether he *borrowed* the money from the bank. Mr. Brown who receives the cheque can either go to the bank and ask for £100 in cash or he can take the cheque and put it into his banking account. If they both bank with the Westminster Bank, then a few changes in the bank's books will be all that has taken place in making payment for the purchase. There will be a deduction from Mr. Jones's account and an increase in Mr. Brown's account.

Such transactions can be made more complicated and for far larger sums, but the principle remains the same. The claims that a person creates against himself by buying (that is, he has to pay money), and the claims he acquires over others by selling (that is, he has to receive payment) are brought together at the bank and cancelled. For example, if Mr. Jones bought goods to the value of £100 from Mr. Brown, and Mr. Brown bought goods to the value of £100

from Mr. Smith, and Mr. Smith in turn bought goods to the value of £100 from Mr. Jones, then Mr. Jones gives Mr. Brown a cheque, which he puts into the bank. Mr. Brown gives Mr. Smith a cheque which he puts into the bank and Mr. Smith pays Mr. Jones with a cheque which is put into the bank. And so—and the transaction could have been lengthened—all these commercial affairs have been transacted, not by any cash payment, but simply by a few entries in the books of a bank.

Nor is there any greater difficulty if these three business men bank at different banks, let us say at the Westminster, at the Midland, and at Lloyd's Bank. For these banks arrange to have representatives to meet at the Clearing House, where all the claims by banks against each other are cancelled out. It may be that the claims do not cancel out exactly, that at the end banks may owe one another small sums of money. These can be paid in cash, but even this cash payment is usually avoided. For each bank itself keeps an account at the Bank of England, which is the bankers' bank, so that even these small differences are paid by a cheque on the Bank of England.

The London Clearing House is the most important, but there are local clearing houses in many of the larger provincial towns. The London Clearing House is by far the largest, so that for the sake of administration it is divided into three departments:

1. The Town Clearing Department, for all banks in the City of London area,
2. The Metropolitan Clearing Department, for banks within the London Postal area, and
3. The Country Clearing Department, for the bank branches which are not included in any of the Provincial clearing houses. Their representatives meet in the London Clearing House to discharge their obligations, for example,

for the week ending September 28th, 1932, they effected payments to the amount of 546 thousand million pounds.

London is not only the clearing house for England, it is also becoming the world's clearing house. The principal foreign and colonial banks have branches and offices in London, and the London Clearing House deals with their mutual indebtedness too, and Bills accepted by London *Financial Houses* have an international reputation for soundness. Since the War, however, "Wall Street" is becoming a serious rival to London.

The Banking System is thus itself a great Clearing House where purchases and sales are registered and cancelled against each other. Because banks are still mainly national, International trade is carried on mainly by Bills of Exchange. The chief result of this use of Cheques (mainly in internal trade) and Bills of Exchange (mainly in external trade) is to economise the use of gold as a medium of exchange, although of course it still remains the standard of value. "It substitutes an institution, the Money Market, for a commodity, gold." It thus facilitates the exchange of goods, which makes possible in its turn the localisation of industry. The bankers themselves are specialists in the craft of exchange. Their industry is a further example of the specialisation which modern commerce entails.

Of course if this method of payment were always used, all purchases and sales could be simply registered in some bank and all claims cancelled out. There need be no gold in circulation at all (or bank notes representing gold). But as day-to-day payments necessitate some coin, banks have to keep a reserve on which the vast edifice of credit is built.

But banks do more than economise gold and facilitate the exchange of goods. For Mr. Jones was able to write out cheques to the value of £100 not merely by *depositing* that amount with the bank but by *borrowing* that amount from the bank. For the sake of simplicity we will imagine the

account of a bank and a client when

1. The client has deposited £100 or when
2. The client has borrowed £100.

for the banker's balance sheet will tell the story best.

1. When the client has deposited £100.

<i>Liabilities</i>	<i>Assets</i>
Deposits of customers £100.	Cash £100.

The client is given a cheque-book and can write cheques to the amount he has deposited. He will generally pay by cheque for his purchases. The payee can either go to the bank and ask for cash, or he can add the cheque to his own account. On an average the demand for cash (in proportion to the amount of money necessary for all transactions) will be small. How small will, of course, depend on public confidence, the state of the money market, and the reputation of the bank.

The banker therefore finds that he need not keep an amount of cash in his vaults equal to the amount which he may be called upon to pay.

If he finds (for example) that a safe proportion between cash and reserves is 20% then he can lend—on the basis of the £100 deposited—£500. As he has already permitted the depositor to draw on him for £100, he still has £400 to lend. If borrowers now arrive he can accommodate them by giving them a cheque-book and permitting them to draw on him up to £400. The banker's account will then stand

<i>Liabilities</i>	<i>Assets</i>
£500	Cash £100
(deposits of customers)	Securities £400
	(left by those who have borrowed)

Out of the interest on the £400 lent the banker can pay his interest to the depositor and make a profit for himself. So

that the banker makes his profit by "adding to the media of circulation." He has added £400 to the amount of money in circulation. And be it noted that Deposits of Customers do not mean actual money deposited with the bank; they do include some deposits but they also include loans made by the bank to its customers, that is, of credit given by the bank. A bank is therefore something more than a money-box where one's spare cash can be stored; it is even something more than a money-lender's office for the borrowing and the lending of money. It is a manufactory of credit, for in banking language "a deposit and an issue (of credit) are the same thing."

On the basis of the £100 deposited the banker has been able to put £500 in circulation. He relies on the fact that rarely will those who can claim ready cash actually do so, for should they do so, both he and they will suffer. He trusts that sufficient confidence will exist in the community to accept these cheques, and that the cash that may be needed will be only a small proportion of their claims. The bank is therefore able to manufacture credit and—to appear paradoxical—it makes its profits by lending money it never in fact has.

The question arises, what reserve should the banker retain in order to make his business safe? that is what cash reserve should be adequate to meet the demands for cash that may be made by clients who have either deposited money with the bank or obtained advances from the bank? Again as the bank has assets (for the banker lends his money out on security), it is equally essential that these should be as "liquid" as possible, that is as realisable as possible.

The problem of the reserve is indeed the "banker's dilemma." If his reserves in proportion to his liabilities are small, that is if he has lent rather freely, then he may indeed make large profits on those loans, but he imperils his security. For if confidence is in any doubt, there will be a run on the bank. He will be unable to meet the demands for cash made upon him and his ruin may well involve a countryside. On the other

hand, if his reserve in proportion to his liabilities is large, he will be indeed playing for safety but he will reduce his profits, and he may even cause his clients unnecessary difficulties, for they rely upon him for advances.

In Belgium and in the U.S.A. the proportion of reserves is fixed by law. This law has not, however, given the security it intended. In times of confidence the proportion is too high, so that banks can neither make high profits nor accommodate their clients as they should. In times of crisis, the proportion is too low and therefore does little to avert or avoid a panic. And the banker by keeping within the law can disclaim any responsibility.

On the whole, a larger reserve is needed by a bank in a very populous area than by one in a scattered rural community. For among the latter the news of disaster spreads less rapidly than in an area where panic is more infectious.

Again, where bankers pool their resources, a smaller reserve is needed than where banks work in isolation. For example, if there are two banks which divide the business of a small country town between them, then their separate Balance Sheets might show

<i>Liabilities</i>	<i>Assets</i>
Deposits £1000	Loans £700
	Cash £300.

A panic begins and there will be a demand for cash. Persons who have previously accepted cheques will now demand cash and clients also now withdraw cash. If £150 is so withdrawn then their Balance Sheets will stand

<i>Liabilities</i>	<i>Assets</i>
Deposits £850	Loans £700
	Cash £150

Owing to the drop in the cash reserves the banks will be compelled to stop granting any further credits. Now if a client were in further need of money (say £150) the bank must

refuse him, and yet the refusal may not alone ruin the client but actually precipitate the crisis they are all trying to avert. For if the bank grants him the loan, he draws a cheque for £150 in favour of some person who is a customer of the bank. He in turn takes it to the bank and demands cash. The cash payment of his cheque has drained away all the bank's reserve and the bank fails.

Had there been one bank or a common clearing house this difficulty could have been avoided, for the receiver of the cheque would have put it into the *same* bank that granted the loan and no cash might have been needed. Similarly if there had been a common clearing house or a central bank then the balance of the two banks would have been adjusted by simple book entries at the central bank. For example, if bank A's cash reserve becomes small, then the cash reserve of bank B becomes large. But the total cash of the central bank remains unaffected. Consequently all that the central bank needs to do is to ask bank A or B to deposit securities (which they both have) against the loan it makes.

In England such a Central Bank exists in the Bank of England, which is one of the reasons why the cash reserve of the English banking system is, relative to its liabilities, the smallest in the world. The reserve too is concentrated at its most vital point—the Bank of England, for all banks keep the greater part of their reserves in the form of deposits with the Bank of England.

In England no law regulates the proportion of cash reserves to liabilities that a bank must keep. It varies therefore with the state of confidence and the business needs of the moment. When credit is good the reserves are low, when credit is bad the reserves are increased. In practice this method has been found to be more economical than a legal minimum. For when credit is good it permits loans to be made freely and business to expand. It has been found to be also safer in the long run, for the responsibility which is placed on the banker

of constantly testing the temper of the market makes his judgment more sound and his experience of value. He has constantly to anticipate the demand for cash and adjust his reserves accordingly. He "senses" the money market instead of merely relying on the statutory figure.

In the English banking system, the cash reserves are for a further reason still smaller than they would otherwise have been. It has already been seen that they can be reduced with safety because the Bank of England is the bankers' bank. But in addition, the Bank of England itself carries on the business of an ordinary bank, so that it keeps only a proportion of *its* assets in cash. But the other banks treat their deposits with the Bank of England as cash deposits, whereas in fact the reserve which the banks state they are keeping is not entirely a cash reserve. The Bank Charter Act of 1844 permitted a still further reduction by allowing the Bank of England to issue £14 millions (now increased to nearly £20 millions) against securities.

This makes the judgment and the banking skill of the directors of the Bank of England of fundamental importance to the whole English banking system. Various schemes have been suggested whereby the cash reserve of the Bank of England and therefore of the whole English banking system would be increased, but these are problems of the future.

The problem now remains, if so much trust is placed in the English banker, how in fact does he protect his reserves? In time of boom he will lend freely, for the more he lends the greater are his profits, and by lending freely he will encourage old-established businesses to expand and new industries to begin. But he will carefully watch the market. If he at all anticipates a demand for cash, then he will begin to restrict his advances (he will also discount fewer bills and so retain available cash). In the meantime his previous loans will fall due (as will the Bills he holds) and his cash reserve will be increased.

But if he restricts his advance suddenly, he may again precipitate the crisis he wishes to avert. For so many business men rely on bank advances, that a refusal may well begin the panic.

A gradual and safe restriction is however obtained by raising the rate of interest charged on all advances (as well as the rate of discount on all bills). By this means all who must have accommodation pay the higher rate and all who can wait avoid borrowing at the moment when they have to pay the higher rate.

The Board of the Bank of England meets every Thursday and decides the Rate of Discount on Bills. This is called the Bank Rate. The Bank of England will always discount a bill with two London names on it—at the official bank rate. Normally bills are not brought to the Bank of England because the ordinary Joint Stock Banks and Bill Brokers, generally discount them 1% cheaper than the Bank Rate. But in time of financial difficulty when banks and bill brokers can spare no cash, then the Bank Rate becomes effective. The holders of Bills go to the Bank of England to get them discounted at the official rate.

If the Bank Rate is raised high enough, gold shipments may come from abroad to earn the higher interest. This relieves the pressure on the English cash reserve.

London has for long enjoyed the prestige of being the chief money-market of the world because (till England went off the gold standard) the Bank of England would always give gold for a bill with two London names on it. It is still the chief clearing house of the world's commercial transactions.

There remains the further problem of the relation of Banks to industry as a whole and to the general level of prices in particular.

People generally borrow from banks and banks accommodate them. The loans may be used for a variety of purposes. The spendthrift may use it to gamble, the prudent

business man to extend his business. Now if the money is used for gambling purposes the borrower may win or lose. If he wins he will put back the money in the bank. If he loses then the winner will take the cheque and put it to his account in the bank. If the gambler takes his loan in cash, again, the winner will simply put the whole back again into the bank. In other words, all that has happened in every one of these transactions is merely a transference of accounts in the books of the bank.

If however the borrowed money is used in order to expand industry, then more men are employed and they need wages. It is true that wage-earners will spend their wages at the grocer's and the butcher's, and that as money accumulates in these tradesmen's tills they will take it to the bank. For example, the borrower goes to his bank and draws (say) £100 of his loan in cash in order to pay his wage bill. But the greater part is spent by the men with the local shopkeepers, who but a few days later take it back to the bank. But not all; for part will remain in circulation.

Whenever loans are so used for productive purposes, there will be a demand for cash which will deplete the banker's reserve. But as most loans are now used for productive purposes, every loan will imply a demand for cash and will therefore deplete the reserve, even when cheques are employed.

Now it has been seen that a fall in the cash reserve will cause the bankers to raise their rate of interest (and a rise in their cash reserve to lower their rate of interest). But a fall in the banker's cash reserve signifies that there is more money in circulation. And it has been seen that an addition to the amount of money in circulation will raise prices. That will mean that every increase in the amount of loans granted by bankers will tend to raise prices, until counteracted by an increase in the amount of goods produced.

The converse will also be true. A decrease in the amount of loans granted by bankers will tend to lower prices, until the

amount of goods produced is proportionally diminished. There is therefore a regular rhythm connecting banks, industry and prices.

An increase in loans tends to be followed by a rise in prices, a rise in prices tends to be followed by an expansion in trade. This in turn leads to a drain on the bank's reserve and a rise in the bank rate. A rise in the bank rate lessens the demand for loans, which in turn tends to lower prices. This leads to a restriction of trade and then to the return of cash to the bank. The banker therefore lowers his rate of interest, which again encourages people to borrow and expand their industries and leads to higher prices. So the rhythm continues.

SECTION B.

A bank's balance sheet should now be intelligible and serve to summarise the activities of the banks.

<i>Liabilities</i>	<i>Assets</i>
Deposits of Customers.	Cash at hand and at the Bank of England.
	Loans at call and at short notice.
	Bills discounted and advances.
	Investments.
	Bank Premises.

1. *Deposits of Customers represent*

- a. The savings of customers actually deposited with the bank.
- b. The larger part however represents **sums** which have been *lent* to customers in the form of book credits.

2. *Cash at hand and at the Bank of England.*

- a. Cash at hand stands for the till money which every

banker keeps for the ordinary business of the day.

- b. Cash at the Bank of England represents the money which is not needed for the daily business and also a reserve of cash against a time of crisis when there may be a run on the bank.

Together they represent the Banker's First Line of Defence. To these he will turn first in any threat of a financial crisis. Obviously, too, this amount will represent a very small proportion of the whole, for it will be earning the banker no interest. His Second Line of Defence is:

3. Loans at Call and at Short Notice.

These are loans by the banks to Bill Brokers and Discount Houses. Both of these institutions are dependent on loans from banks in order to provide themselves with working capital. They obtain these loans at a very low rate; first, because they offer excellent security and secondly, because they agree to repay the loans either immediately they are called for (loans at call) or after a few days (at short notice). This is useful to the banker, for he can obtain his money easily and rapidly, but owing to the very low rate of interest he obtains, he cannot afford to use all his money—just playing for safety. He has to find a far more lucrative use for his money. This he finds in

4. Bills Discounted and Advances.

Good Bills of Exchange are in every way ideal. They are excellent security. They are an ideal investment, for when the date of payment arrives they realise themselves without any possibility of depreciation. There may indeed be two notes of uncertainty. First, it may happen that all the parties to the Bill will be unable to meet their obligations. Secondly, it may happen that there will occur an urgent demand for cash which will compel the banker, even after calling in loans, to

sell the Bill at a loss. But if any one of the parties to the bill remains solvent and if the banker can at all wait until the bill matures, then there is no possibility of depreciation, as there may be in stocks and shares. Next come

5. *Investments.*

These do not generally form a large proportion of bankers' assets. At first this might appear strange, for the return to be obtained by investing in gilt-edged securities, is larger than that obtained by discounting bills, and in addition there is no worry as there is in constantly renewing suitable bills. But the real reason is the desire of the banker to keep his assets *liquid*. It has been said that the art of banking "is being able to distinguish between a Bill of Exchange and a Mortgage." A Bill of Exchange is the best example of a "liquid" asset, for a Mortgage "freezes up" one's money for a long period of years. So that the banker finds that a portion of his stock of bills will mature almost every day. These he can then retain as Cash at hand or re-invest in bills. No gilt-edged securities become daily redeemable at par, and if he were obliged to sell in order to meet any money stringency, he might have to sell at a loss. Last come

6. *Bank Premises.*

This is a very small item in proportion to the total but a useful investment in good freehold property.

The most important item on the balance sheet is the proportion of Deposits of Customers to Cash at hand and at the Bank of England, for the one represents the largest amount which the Bank may have to pay to its customers and the other the amount of money immediately available to pay customers. The proportion between them represents the strength and the stability of the bank. Because balance sheets are now legal and public, the banker generally tries to show as large a proportion of Cash at hand as possible. It is therefore possible that just

before publication he calls in some of his loans. By so doing he diminishes deposits of customers or increases cash or does both. This probability is supported by the fact that the figures published do not represent average figures over the month, but the figures on a particular day, as well as by the relative difficulty there is in obtaining a loan at the end of the month. The return of the Bank of England, being the pivot of the English banking system, is even more helpful.

The following is the return of the Bank of England for the week ending Friday, September 30th, 1932 (taken from *The Times*).

ISSUE DEPARTMENT			
Notes issued:		Govt. debt	£11,015,100
In circulation	£359,784,231	Other Govt. securities	250,488,838
In banking department..	54,636,982	Other securities	9,683,530
		Silver coin	3,812,532
			<hr/>
		Amount of fiduciary issue	275,000,000
		Gold coin and bullion	139,421,213
			<hr/>
	£414,421,213		£414,421,213
BANKING DEPARTMENT			
Capital ..	£14,553,000	Govt. securities	£69,918,094
Rest ..	3,677,446	Other securities:	
Public deposits ¹	23,417,643	Discounts and advances	12,069,350
Other deposits:		Securities ..	18,072,412
Bankers ..	80,626,456	Notes ..	54,636,982
Other accounts	33,397,175	Gold and silver coin	976,167
Seven-day and other bills ..	1,285		<hr/>
	£155,673,005		£155,673,005

¹Including Exchequer, Savings Banks, Commissioners of National Debt, and dividend accounts.

This Return, it must be noted, is in the revised form following the passing of the Currency and Bank Notes Act 1928.

Under this Act, the old form of Return was authorised to be modified "to such an extent as the Treasury, with the concurrence of the Bank, may consider necessary."

A. THE ISSUE DEPARTMENT.

(1) *Notes have been issued* to the aggregate value of £414,421,213. This aggregate value is made up of the Bank's original note issue *plus* the amount of the Currency notes transferred by the Treasury to the Bank (by the Currency and Bank Note Act). As can be seen, of this aggregate, the amount of £54,636,982 is held in the Banking department.

In the previous form of Return, only the item Notes Issued was given and the amount of Notes in Circulation or "active" issue had to be found by subtracting from the amount given as "Notes Issued," the amount of notes held in the Banking Department.

In the new Return, the amount of "notes in circulation" is stated separately. The notes in the Banking Department are covered by gold, so that they are equivalent to gold and can therefore be placed on the Asset side of the Banking Department.

(2) *On the Asset Side:* Against the liability of £414,636,982 the Bank holds—

(a) *Government Debt* £11,015,100 is the original debt of the Government to the Bank, created under the Bank Charter Act of 1844.

(b) *Other Government Securities;* this amount was taken over from the Currency Note Redemption Account in 1928.

(c) *Other Securities;* these are securities other than those of the British Government. In the older Return, the Government Debt £11,015,100, and the "Other Securities" which then amounted to £8,734,900 (which together amounted to £19,750,000), was the Fiduciary Issue of the Bank of England

at its maximum; for all private bank note issues had lapsed.

The figure £9,683,530 is made up of £8,734,900 which appeared as the "other securities" in the former Returns plus Commercial Bills of Exchange.

By the Currency and Bank Note Act 1928 the Bank is authorised to hold Commercial Bills as one of its assets against its fiduciary issue: this item "Other Securities" will as a consequence fluctuate in amount.

(d) *Silver Coin*: The Bank had been authorised to hold Silver Coin by the Bank Charter Act of 1844; but, in fact, it had not done so for many years. By the Currency and Bank Note Act 1928, the Bank is authorised to hold silver coin; although not to a greater amount than £5,500,000. This item £3,812,532 also comes from the Currency Note Redemption Account.

Together, the Government Debt, Other Government Securities, Other Securities and Silver Coin, totalling £275,000,000, constitute the backing to the Bank's fiduciary note issue. By the Currency and Bank Note Act 1928, the Bank is authorised to issue bank notes up to the amount representing the gold coin and bullion for the time being in the Issue Department, and in addition to issue bank notes to the amount of £260,000,000 in excess.

By the same Act, the Treasury may, at the request of the Bank, or if it deems it expedient, direct that the Fiduciary Issue be increased above or decreased below the amount £260,000,000. Such authority however must be regularised, for every increase must receive the sanction of both Houses of Parliament.

B. THE BANKING DEPARTMENT.

(1) *Proprietors' Capital*. This stands at £14,553,000. Unlike other banks the stock is fully paid-up and of course the liability of the shareholders is limited. It has remained unchanged since 1816.

(2) *The Rest.* This is undivided profit. It is never allowed to fall below £3,000,000. In each half year the surplus over that amount generally is sufficient to pay the half-yearly dividend. This is then a reserve consisting of accumulated profits.

(3) *Public Deposits.* These represent the balances standing to the credit of the various government departments; for the Bank acts as the Government's Banker. They include for example the accounts of the Exchequer, of the Savings Bank and of the Commissioners of the National Debt. They generally increase in February and March when taxes are coming in and they decrease when interest on Government stock is paid out. It is also drawn upon by the Government's spending departments—the Navy, Army, etc.

(4) *Other Deposits.* This is the most important item on this side of the account. It includes the deposits or current accounts of the customers of the bank (in its ordinary banking business) and the balances kept by other banks.

(5) *Bankers.* They comprise the balances standing to the credit of all the *Banking* customers of the Bank of England. All the banker customers regard their balances with the Bank of England as a cash reserve upon which they can draw in case of need. Any increase in this item would then indicate that banks were strengthening their balances in anticipation of a demand for money. Any decrease would indicate that the financial situation was sound. Generally when these deposits are large (unless it is a precaution against an anticipated demand for cash) it indicates that there is a large fund of money "unemployed" and so it coincides with a low price for money.

(6) *Other Accounts.* This represents the balance standing to the Bank's private customers. On these balances the Bank pays no interest. In the older form of Return, Bankers' Deposits and Private Customers' Deposits were not separated, but were shown together as "Other Deposits." The last item

(7) *Seven Day and Other Bills* (they are also known as *Bank Post Bills*) refers to Bills which are issued by the Bank of England for seven days only to its own customers. They are used chiefly for convenience when travelling abroad, for they can be readily cashed. The amount varies, but is always comparatively negligible.

ON THE ASSET SIDE:

(1) *Government Securities* are the Bank's investments in British government-securities. They comprise every kind of government security held by the Department—such as Treasury Bills, Consols and War Loan securities.

(2) *Other Securities*. These are of special interest to the Money Market. They cover the amount of borrowing from the Bank of England, both by its regular customers and by the Money Market.

(3) *Discounts and Advances* consist of the Bank's Stock of discounted Bills of Exchange. It signifies the accommodation granted to the money market. It therefore includes loans against securities as well as bills discounted. When the amount of this item increases, it therefore means that Banks have been calling in their short loans from the money market. The Discount Houses, with whom the short loans are placed, can then repay the Banks only by borrowing from the Bank of England, which they do by getting the Bank to discount bills, or by borrowing upon bills or upon gilt-edged securities. When this item therefore increases, so does the item "Other Deposits."

(4) *Securities* signifies the purchase of bills (other than Government securities such as Treasury Bills) which the Bank of England effects on its own initiative.

(5) *Notes*. These Notes are equivalent to gold, for they are backed by gold held by the Issue Department. If for example, these Notes were presented to the Issue Department

for payment, the following changes would take place in the Return. In the Issue Department, the total of Notes Issued would be reduced by £54,636,982 to £359,784,231, and the item Gold Coin and Bullion by the same amount £54,636,982 to £84,784,231. In the Banking Department, the item Notes would disappear, so that the item Gold and Silver coin would be increased to £55,613,149.

(6) *Gold and Silver Coin* is the Bank's till money. There are two important data to be noted.

(i) While the operations of the Issue Department of the Bank of England are strictly regulated by law; the Banking Department of the Bank conducts an ordinary banking business similar to any other large bank; with the one exception that its deposits resemble the Current Accounts of other banks.

(ii) The amounts under the items "Notes," and "Gold and Silver coin" together constitute *the Reserve*, the amount of money which the Bank keeps in order to meet the calls which may be made, either for withdrawals or for loans. The percentage which the Reserve bears to the Liabilities is called the Proportion and is the index to the strength of the Bank.

This proportion is not of course expressly stated, but it is easily calculable. For example, in the Return quoted, the Bank's total liabilities in respect of Public Deposits, Other Deposits and Seven Day Bills amount to £137,442,559. Against this liability the Bank holds Notes (which are equivalent to gold) and Gold and Silver amounting to £55,613,149. Consequently the gold holding of the Banking Department or the Reserve is (approx.) 41% of its liabilities to its outside creditors.

Of course this Reserve applies to the Banking Department only.

The proportion of the Reserve in the Issue Department is

fixed by law. It has already been seen that the Bank of England is an ordinary bank as well as the bankers' Bank. The Proportion is therefore a matter of grave concern to all. Many maintain that it is far too low. For this amount of gold is practically the only free stock of gold in the country; for all the gold held by the Issue department is the backing for the Notes issued by that department. The Bank of England is subject to a regular and periodic drain on its reserve—during holidays, at harvest time—and to a regular inflow from taxes, because it is also the Government's bank. On a threat of a crisis or of war there will be a drain on this reserve, and the bank has to face the possibility of such occurrences. It could of course stop payment in gold but that would only increase the panic. It could enter the market and buy gold at the bullion rate, and therefore dearly, but this method although effective would prove too expensive. The method generally adopted is to raise the Bank Rate, which encourages a flow of gold into the Bank with which to meet the demand for cash.

The action taken by the Bank of England at the outbreak of war in 1914 will illustrate Banking procedure in a crisis and how the government came to the help of the financial institutions of the country.

(i) In August, 1914, Bank Holiday fell on Monday the 3rd. It was clear by the 1st that war was coming. Now the first week in August is always a time of large withdrawals of cash. This, coupled with the threat of war, made this period almost a panic week. The demand for cash was so great that the Bank Rate was raised to 10%.

(ii) The Governor of the Bank of England then obtained from the Prime Minister and the Chancellor of the Exchequer the authority to suspend the Bank Charter Act, and so gave the Bank the power to increase its fiduciary issue.

(iii) To provide time to deal with the crisis, an order was

issued extending the Bank Holiday from Monday to Thursday.

(iv) To prevent any further depletion of the gold reserve, the Government issued Treasury Notes or Currency Notes of £1 and 10s. as legal tender.

(v) To prevent the price of gold being still further lowered by a sudden and extensive sale of securities, and at the same time to prevent foreigners selling out stocks in London, which would still further have decreased the gold reserve, the Stock Exchange was closed on July 30th.

(vi) A Moratorium was declared and all debtors for amounts of £50 and over were allowed to defer payment at first for one month and then for three.

(vii) A Foreign Debt Committee was set up which gave relief to traders who had money owing from abroad, up to 50% of the debt.

(viii) The Bank of England was authorised by the government to discount approved pre-moratorium bills. The acceptors of such bills were given the opportunity of postponing payment on paying interest of 2% above the bank rate.

Since the war several committees have suggested various proposals, either for going back to the gold standard (the issue of Treasury Notes meant a fall from the gold standard in so far as a £1 note was not redeemable on demand) or for adopting some managed standard. The budget of Mr. Winston Churchill brought England back to gold, but in 1931 England fell from the gold standard and the whole problem of international trade and exchange media is open to doubt and difficulty.

In 1918 the government appointed a Committee to examine and report on the tendency in banking to amalgamation and concentration. As in all other departments of economic life, the advantages of combination depend ultimately on the fact that the greater economy of combined working outweighs the menace that may arise from monopoly. As a result of the

Report of the Committee, all future amalgamation must receive the sanction of the Treasury. But already the Big Five (Barclays', Midland, Westminster, Lloyd's and National Provincial) concentrate in their control the financial machine of England. Those who favour closer concentration argue that only by amalgamation is efficient administration and control possible, that unified administration and control is necessary for efficiency and essential in time of crisis.

Their opponents reply that the size of the new industry will become too great for average ability, and that organisation and red-tape will kill initiative and new banking development. To the argument that amalgamation means that the Reserves are better concentrated at the strategic point and better managed, the reply is given that concentration of resources so powerful is to be feared as having social dangers, and that further concentration is not needed since the Bank of England already fulfils that function to a degree unknown anywhere else.

It is also argued that when Private Banks are absorbed their accounts then are made public and so open to criticism, but they could easily be made public by a law stating that all banks, private as well joint stock, should publish monthly accounts. Finally it is stated that by amalgamation better service can be offered to international trade. In any case this tendency to concentration is not confined to banking but to every industry and to every trade. The twentieth century will witness cotton trusts and oil trusts, steel trusts and banking trusts.

The General Work of a bank can now be followed and stated. It is said that its chief function is the "exchange of money for credit and of credit for money," but although this is true it is too vague. In more detail then

1. *A bank receives deposits.* When a person deposits with a bank, it is said that he opens an account. There are two

types of accounts (a) A Current Account which the depositor can draw (in legal tender money) on demand. Generally the bank charges a commission for this service of looking after the customer's money. (b) A Deposit Account which gives the banker some time to repay if demanded. On this the banker pays interest. A customer can of course have both kinds of accounts.

2. *A Bank grants loans* on security and charges interest. The loan may be in money. More frequently it is a permission to draw cheques up to the amount of the loan.

3. *The Banks cancel indebtedness* and balances all payments. The banks are helped of course by the Clearing House.

4. *The Bank can act as an agent* for the customer in many ways.

a. The strong room is at the disposal of customers, to deposit any valuables and documents.

b. Most banks act as executor if required.

c. The bank can buy and sell stocks and shares.

d. The bank can collect the interest and dividends on stocks and shares.

e. The bank can pay regular subscriptions to clubs, societies and schools.

5. *The Bank can discount Bills of Exchange.* Any holder of a bill may go to the bank and get it discounted, that is the bank will give him its present worth at the market rate.

6. As a cheque requires endorsement, by transacting all business by cheque the bank keeps the accounts of clients.

7. In England the Bank of England alone can issue bank notes, although in Scotland bank notes of £1 and more are legal tender. These are special functions of the banks, whereby they earn their living, so to speak. They satisfy these wants and are paid for their services. But banks also render a Social Service; they are of Social Utility. Without them modern industry and commerce would suffer.

(a) By helping the exchange of goods, they make possible that specialisation which it has been seen is also co-operation of men and areas.

(b) They therefore help Man to make the best use of the various and differing qualities of different parts of the earth.

(c) They help the exchange of goods by 'bringing together all promises to pay cash and then cancelling them out. So that an institution, the bank, has replaced a commodity, gold, as a medium of exchange.

(d) By their credit system the Banks finance production in anticipation of demand. It has been seen that production is very roundabout and that producers have to study demand. Now a business man who sees a chance of launching a new industry or of extending an existing industry has two primary sources with which to finance the enterprise—his savings and his current income. Greater than either is the credit he can obtain at the bank. He has of course to offer security. But the bank really never expects to have to realise the mortgages and the documents he has lodged as security. The real security is the added product which the advance will enable to create and from which the borrower will be enabled to repay the loan.

(e) The banks, too, help production to work smoothly. For example, new machinery may be needed during the process of production or a special fertiliser may be needed in agriculture if the plant is found to be attacked by a pest. The bank again supplies the advance with which to buy the necessary machinery or the essential scientific equipment. But for the bank the industry or the crop would have failed. The bank is again repaid from the *additional* product which the advance has made possible. Credit, here, is therefore the exchange of present goods (the machinery or the fertiliser or whatever may have been needed which was bought by the bank's advance) for future goods (the additional pro-

duct of the factory or the crop of the field which but for the credits would never have been produced). The producer in fact buys the machinery or the science with the future product or his future crop. Banks therefore make production less jerky and more continuous.

(f) Banks, too, enable wealth to be raised and transported to those people and to those areas where it is in great demand. So that they make possible the large scale enterprise and specialisation upon which the material prosperity of the present world is built. Criticisms against Banks and their Credit system there are, but they are generally based on the dangers of a too easy credit system. It is contended that such a credit system may lead to extravagance, that it may encourage non-economic production and so produce serious fluctuations in the world's markets where stability is essential. It is suggested that where a firm is really declining the granting of credit will only intensify the failure when it does happen. But in spite of all criticism the Banking system is now essential to production. A community without such a Credit System is in the same position as a community without machinery or without specialisation, that is a community materially the poorer.

CHAPTER XII

INTERNATIONAL TRADE

A MARKET is a place where buyers and sellers meet to buy and sell. With the development of a world market for commodities, the idea has been extended to cover a commodity with buyers and sellers buying and selling under perfectly free competition.

The Money Market fulfils almost to perfection this definition. Credit can be transferred with such rapidity, even gold shipments (when permitted) performed with such ease, that money can be bought and sold with the least possible friction. Like all specialised markets, the money market is centralised in the "City" where specialised dealers (buyers and sellers) concentrate. In a similar way other commodities have their specialised market, wool in Coleman Street, corn in the Baltic exchange.

In America the money market centres in Wall Street. In England, Lombard Street has traditionally become the pulse of the money world.

The *use* of money is bought and sold—that is money is borrowed and lent. The chief lenders are the banks; the chief borrowers are Bill Brokers, and Stock Exchange Dealers. The components of the Money Market are the Bank of England, and the other Banking institutions, the Discount Houses, the Accepting Houses, Dealers in Foreign Bills, Underwriters, and the Brokers and Jobbers of the Stock Exchange.

Of recent growth has been the powerful influence of the Government; for the government borrowings and the large payment of dividends have considerably affected the market.

1. Discount Houses, as their name implies, specialise in Dis-

counting Bills. For ready cash they buy—that is Discount—Bills of merchants who need their payments now! These merchants have sold goods and received Bills as payment. They could wait till these Bills mature, but they prefer immediate payment. It has been seen that the function of these Discounting Houses is being gradually taken over by Banks.

2. Accepting Houses—as their name also implies—“accept” Bills on behalf of merchants and charge them, of course, for their services. The merchant may be perfectly solvent and be able to pay the amount required. But beyond his own land he may be unknown. The Accepting Houses are generally of international repute. In origin some were themselves merchant houses. They found however that because of their reputation their bills were accepted everywhere. They have become specialised Acceptors. The Banks, too, are gradually taking over the work of the Accepting Houses.

3. The Stock Exchange does not engage in any financial industry. It does not raise money for new industries. It is simply a specialised market for stocks and shares which already exist. The members include (1) *Stock Jobbers*, who are the actual dealers; they buy and sell for clients. They make their profits from the difference between the buying and selling price of stocks and shares. What speculation goes on is also done by the Stock Jobbers. “Bulls,” for example, buy up shares, which raises their price. As most people look to the price index, as indicating value, they too follow and buy more, so still further raising their price. Then the Bull sells and makes a large profit. “Bears” do the reverse, they sell in order to depress the price and then buy back at a figure far below that at which they sold. (2) *Stock Brokers* act as agents between the public and the Stock Jobbers. They make their profits from the commission they charge; so that if any person wishes to buy or sell shares, he finds first a Stock Broker, who charges him a commission, then the Stock Broker finds a Stock Jobber to carry out the sale. (3) *Underwriters*

are generally commercial houses which for a consideration underwrite new issues. If a company promoter wishes to float a company and wants to make sure that the money will be subscribed, he goes first to an underwriter who, for so much per cent., promises to take up those shares which the public do not. If all the shares are taken up by the public, the underwriter has nothing to do but receive his charges.

In the money market the *use* of money is bought and sold at a price. The "Price of Money" is therefore the amount that is charged for its use. Like the price of all commodities the price is determined by the demand for and supply of money. (Note that the *Value* of Money is its Purchasing Power.) The price that is paid for the use of money is called Interest, and the Rate of interest will therefore vary with the supply and the demand of money, with the nature of the loan and with the length of the period for which the loan is needed.

Closely akin to the Interest Rate is the Discount Rate. A Bill is generally made out to mature at the end of a stated period. If the receiver wishes to realise it immediately he pays a price—the Discount. It is the difference between the present value of the bill and its face value. So that it is really a rate of interest. For the two rates are mutually dependent, as there cannot be two different prices for money in the same market. If for example Interest Rates were 5%, and Discount Rates were only 4%; then if other factors were equal, money would be withdrawn from interest-bearing investments and put into discount investments. There are differences, but these are due to other factors—one investment may entail greater risk than the other.

The Bank of England Rate is a Discount Rate. It is generally above the Market Rate or the rate charged by the Banks. Banks prefer to keep a large proportion of their assets liquid, and therefore lend money to Brokers at call or short notice. Their rate is lower than the Market Rate, because of the

onerous conditions of repayment. This is called the Call Rate.

Now the Money Market is an international market and the use of money for international purposes is needed to pay for and finance International Trade. It has already been seen that International Trade equalises out the world's products, for it encourages the production of goods where they can be produced cheaply and discourages their production where they are produced dearly. Through international trade, areas are supplied with those commodities which they most need. It enables people to enjoy goods which they cannot produce themselves or which they could produce only at prohibitive costs. It averages out the price of commodities, for without international trade those goods which were difficult to produce would be sold at extravagant prices, while those which were easy to produce would be very lowly priced. International Trade therefore promotes international division of labour.

There are two peculiar features in International Trade which need special mention.

The first is the Law of Comparative Costs; the second is the method of payment in International Trade.

1. The Law of Comparative Costs is the application to International Trade of the economies which every large firm applies internally. For example, a large firm with many branches will have to decide what each branch is to produce or sell. If the firm happens to own a chain of stores, and it is found that store A can pack far more tea than store B, but that store A can pack an even larger quantity of cheese, then it will pay the firm to allow store A to pack cheese, and store B to pack tea, although store A can pack more tea than store B. Similarly, the Managing Director of the business may know that his Manager is a far better salesman than the actual salesman he employs, but he will not as a consequence ask his manager to do the work of the salesman. For although he can sell better than the salesman he can

manage even better still.

Similarly countries will tend to specialise in the production of those commodities for which they have the greatest *comparative* advantage. For example; let us imagine two countries Altonia and Bytria, engaged in trading with each other. It is found that in Altonia

Boots can be produced at 10s. a pair.

Hats can be produced at 5s. each.

and that in Bytria

Boots can be produced at 20s. a pair.

Hats can be produced at 10s. each.

that is, that these commodities cost twice as much in Bytria as they do in Altonia. The inhabitants of Bytria wish to take advantage of the cheapness of goods in Altonia and begin to import boots and hats. They pay for them of course in money. Then the influx of money into Altonia will cause prices to rise. The efflux of money from Bytria will cause prices to fall there. This will go on until in both countries boots may cost 15s. a pair and hats 7s. 6d. each. There will be no further advantage in importing these commodities from Altonia and trade will therefore cease. Permanent trade is impossible between these two countries, for neither country has a permanent advantage in *relative* costs. In both commodities the relative costs are 2 to 1.

Now let us imagine that these countries have different relative costs of production.

In Altonia boots still cost 10s. a pair,
hats still cost 5s. each.

But in Bytria boots cost 30s. a pair,
hats cost 10s. each.

Altonia still has the cheaper commodities. People from Bytria will therefore buy their goods from Altonia and send

money in exchange. The same results will again follow. Goods in Altonia will increase in price and goods in Bytria will decrease in price. And as a consequence it may well happen that boots will cost 15s. in Altonia and 25s. in Bytria, while in both countries hats will cost 8s. 6d. It will then not pay to export and import hats, but it will still pay Altonia to export boots. Between Altonia and Bytria permanent trade has now become possible and it will now pay Altonia to specialise in making boots and Bytria to specialise in making hats.

The advantages thus obtained can be worked out mathematically to show that these conclusions are correct. For example, in these two imaginary countries, before each had begun to specialise in what was of relative advantage to each, 100 pairs of boots cost £50 in Altonia and £150 in Bytria; 100 hats cost £25 in Altonia and £50 in Bytria; so that altogether 200 pairs of boots and 200 hats cost £275. But now that each country specialises, Altonia will specialise in making boots and 200 pairs of boots will cost £100. Bytria will specialise in making hats and 200 hats will cost £100. So that altogether 200 pairs of boots and 200 hats will cost, when each specialises, £200. There is a net social gain of £75 to be secured by specialisation.

All foreign trade is therefore carried on within the limits set by the comparative costs of production. From this there follows a strange corollary—that it may actually pay a country to import a commodity which she can produce more cheaply herself. Of course she can produce *other* commodities still more cheaply.

2. The problem now arises how these goods are paid for. Of course gold could be sent to pay for the goods. But that would not only be wasteful, but also there is not enough gold in the world to pay for all the goods exchanged internationally. Barter would be possible (and when normal exchange breaks down is still resorted to) but that suffers from all the draw-

backs that barter entails. Here, *par excellence*, the Credit system functions. All the claims which are created by buying and selling are brought together and cancelled out. For example if A, a merchant in England, sells to B, a merchant in France, coal worth £100, and B sells wine to C, another merchant in England, also to the value of £100, then instead of B sending £100 across to pay A for the coal and C sending £100 across to pay B for the wine, it would be a very simple matter for C to pay A the £100 and all these transactions will be settled without the risk of loss, and the worry of sending coin and bullion.

This is in fact what takes place when payments are made by a Bill of Exchange. According to definition—a "Bill of Exchange is an unconditional order, in writing, given by one person to another, signed by the person giving it, requiring the person to whom it is addressed to pay on demand, or at a determinable future time, a certain sum in money to, or to the order of, a specified person or to bearer." In form it is

£2020.
Stamp 10s.

LONDON.
May 1932.

Three months after date pay to Mr. Arnell or order the sum of two thousand and twenty pounds for value received.

Signed: E. ARNELL.

To Mons. Le Brun.
France.

Three copies are generally made, so that there shall always be one available if the others are lost.

(Mr. Arnell is known as the drawer, Mons. Le Brun as the drawee. After accepting the Bill, he is known as the acceptor. If Mr. Arnell discounts the bill with Mr. C, then Mr. C becomes the holder of the bill. If C signs his name on the back of the bill and transfers the bill to D, then D becomes

the holder and C the endorser and he is liable to pay D if B fails to.)

A Bill of Exchange now has several uses. It enables a debtor to pay a creditor in a foreign country. It also enables a seller to receive immediate payment, while the buyer prefers to defer payment until he has marketed the goods that he has bought. For this latter purpose the Bill of Exchange is largely used for internal trade.

In the example, A has sold goods to B to the value of £200. B says that he cannot pay for the goods until he has sold at least a portion. A needs money at once. He therefore draws on B a bill of exchange and sends him the document. B then writes across the face "accepted B" signifying that he is willing to pay £200 in three months' time, and then returns the bill to A. Now A can wait three months and then receive the face value from B, or he can take his bill to his banker C and sell him the bill for immediate payment. This is called "discounting the bill." The banker will pay him £200 down, and at the end of three months he will present the bill to B and receive £200. Actually then the banker has charged £20 for a loan to A, of £200 for three months, as well as for the risk of not receiving the money from B. The rate of £20 for £200 for three months is called the rate of Discount. This rate of 5% will, of course, depend on the demand for such loans and the supply of money to satisfy the demand. If for example many people want to borrow money by discounting bills, the rate of discount will go up. If there is plenty of money the rate will go down. The rate will depend too on the financial position of B—a high rate will be charged if his security or solvency is doubtful.

Originally a Bill of Exchange was drawn against actual merchandise, but it has also become a device for obtaining a loan. For example, if A wishes to borrow from his banker, he may draw a bill on B as if there had been a genuine sale, bring it to the banker to discount and arrange with B how

to repay it when the bill matures. Such a bill is called a Finance Bill or Accommodation Bill. In wording and in form it is exactly the same as a Produce Bill. Consequently, when the banker is asked to discount a bill, he knows neither the true nature of the bill, nor the financial position of the drawer and acceptor. It has, therefore, become worth while for persons who wish to discount bills to pay a commission to firms of high repute in order to get them to accept the bill. This will enable them to discount it at a lower rate. The same result is also obtained by paying a well-known firm to endorse the bill after it has been accepted. As a result of the endorsement, the endorsing firm will have to pay if the acceptor fails. The firms who so trade on their reputation and good name by accepting and endorsing bills are the Accepting Houses. A bank will generally discount any bill accepted by a reputable Accepting House so that when a person attempts to raise a loan by means of discounting a bill, it is in fact the Accepting House and not the banker who decides whether the loan shall be granted or not. (It has been seen that Banks are absorbing the business done by Accepting Houses.)

A Bill Broker is generally a firm or an individual who buys, that is, discounts bills, not in order to hold them till they mature but in order to sell them at a profit. As in every industry, in the industry of finance, Bill Brokers are specialists. They specialise in knowing the financial status of drawer and acceptor. Bankers therefore prefer to buy bills from the Bill Broker's stock. He generally keeps a variety of bills so that banks are able to obtain just the type of bill they need. In order to have such a variety of bills the broker requires capital and he obtains his capital from the banks in the form of "loans from day to day" or in periods not exceeding a week. The rate at which they borrow, it has been seen, is "the Rate for Money."

Now when an English merchant owes money to a French merchant, he buys a Bill of Exchange and sends it to Paris.

The French merchant can then discount it or wait until it matures. Or he can use the bill to pay for merchandise he has bought in Germany or in America. Just as in internal trade, when payments are made by cheque, the buyer transfers his claim on a bank to a creditor—so in the case of external trade, the buyer who pays with a bill on a Discount Merchant transfers a claim on the Discount Merchant (which he has acquired by giving him security and paying him for the use of his name) to his creditor. A bill of exchange may therefore be used to settle very many debts and travel round the world. Each firm that uses it to pay a debt will endorse it and so make itself liable to meet it when it falls due if none of the firms whose names appear earlier is able to do so.

Every country buys goods from abroad and pays for them by bills of exchange. But every country also sells goods abroad and receives payment by bills of exchange. So that when these bills cancel out, the cost of imports is the cost of exports. In this sense exports pay for imports. Difficulty has arisen over the fact that if a record were kept at the various customs houses of the value of goods imported and exported, they would not balance. But countries do not merely export and import goods, they also export and import *services*. For example, if English coal were unloaded at Rouen to the value of £1000, the French merchant would have to pay not alone the £1000 (which might be paid by £1000 worth of goods sent to England) but also for the cost of the delivery, that is for shipping services. England not only exports goods, but she also supplies other countries with the services of the Mercantile Marine, of her Insurance Companies, of her Banking System. So that the recorded imports at the ports will be larger than the recorded exports, for some of these imports will be payments for such services. In addition, English folk have large sums of money invested abroad on which interest is paid yearly so that again imports will bulk larger than exports.

To obtain therefore a fairly accurate picture of the total

exports and imports of a nation, it is essential to add to the exports and imports of goods the "Invisible" exports and imports. For just as a business man can ultimately buy goods to the value of the goods he sells, so the nation can only buy to the value it sells.

Over a long period therefore exports and imports must cancel out. Over a short period, however, imports may exceed exports or exports may exceed imports, but whenever that happens gold movements automatically take place (whenever there is a free export of gold permitted) which tend to restore the balance. For example: A, a merchant in England, buys from B, in France, wine to the value of £1000. He can pay for the wine by accepting a bill drawn on him by the wine exporter, or he can arrange with his bank or a financial house to accept for him bills drawn on him by his creditor, or he can buy for cash in England, a bill drawn on some one in France and payable there, which he will then send over to B for his wine, or he can send gold.

To simplify matters let us suppose that A in England owes money to B in Edinburgh, and he goes to a Post Office for a money-order with which to pay him. If he were told that it would cost him 6*d.* for every pound sent, he would of course refuse the money-order and send his debt by registered post. Similarly if the English merchant A who is desirous to pay B in France for wine, on going to his broker finds that for every £100 he could only pay a bill on Paris for 2500 francs, he would refuse the bill, send gold or bullion and there get it transferred to francs, which would give him f.2522, which after deducting 8 francs for freight and insurance would still give him 2514 francs instead of the 2500 francs offered by the broker. So that the Paris exchange can never fall below 25.14. (That is when England and France were both on the gold standard.)

In a similar way the Paris exchange could never rise above 25.30, for if the brokers were to ask for a higher rate, Paris

debtors would pay their creditors by sending gold. Between these two limits the rate of exchange was constantly varying.

Now when England and France were on the gold standard and free export of gold was permitted, this meant that £1 in England was worth a sum of between 25.14 and 25.30 francs in Paris. Francs are silver coins and from this it might appear that gold was exchanged for silver. But the rate is only quoted in the smaller silver units to prevent the awkward quotation in fractions, if the larger gold unit were used. All that has happened is that gold coins of one weight and fineness have been exchanged for gold coins of another weight and fineness. The English sovereign has been exchanged against the French * napoleon. Because these two coins are of the same material their physical relations can never vary, and as bullion the same weights will always have the same value. Their relationship can be worked:

$$\begin{aligned}
 \text{The English gold sovereign} &= 7.98 \text{ Grammes of gold } 11/12 \text{ fine,} \\
 \text{so that it equals} &= 7.315 \text{ pure fine.} \\
 \text{The French gold napoleon} &= 6.45 \text{ Grammes of gold } 9/10 \text{ fine,} \\
 \text{so that it equals} &= 5.805 \text{ pure fine.} \\
 \text{So that a sovereign} &= \frac{7.32 \times 20}{5.8} = 25.22 \text{ francs}
 \end{aligned}$$

In a similar way the relation between the gold sovereign and the German eagle is that one sovereign equals 20.42 marks.

Because the weights of the coins are given to them at the Mint this relationship between foreign coins was called the Mint Par of Exchange. So that the Mint Par of Exchange between London and Paris is 25.22 and between London and Berlin 20.42.

If however one of the countries has a Paper Currency then the Par of Exchange becomes difficult to calculate. It is met by making two calculations. There is generally a gold basis to the Paper currency. First then the Mint Par of Exchange of that gold basis per unit of currency is calculated. Secondly the

value of the gold unit to the paper unit being known; the Mint Par of Exchange of the gold unit is converted to the Paper unit.

It has been seen that it cost 0.08 francs to ship and insure a sovereign between London and Paris. Consequently the limits of the fluctuation in value of London bills on Paris or of Paris bills on London are $25.22 - 0.08 = 25.14$ or $25.22 + 0.08 = 25.30$. These limits are called Gold Points. In countries with silver currencies the points at which it pays to remit specie are called Specie Points, although these points cannot so easily be stated, because there is no Mint Par of Exchange.

Once again therefore let us simplify our problem. Let us imagine that the London merchant deals with the Paris merchant and that Postal Orders are obtainable for use between these two towns. It is found that Paris buys goods to the value of £100 from London whereas London only buys goods to the value of £60 from Paris. Then the Paris post office will sell money orders on London for £100 and will be asked to cash money orders from London to the value of £60. That is, the balance at Paris will be increased by £40. In London the post office will sell money orders on Paris to the amount of £60 and will cash £100 so that its balance will diminish by £40.

Now if their trade continues in the same proportion then there will be a danger that ultimately the balance in London will be drained away. The post office therefore will ask the Paris branch to draw some of its growing gold supply and send it to London. But as the amount of gold in London is increased and the amount of gold in Paris decreased—so will credits increase and prices rise in London, and credits decrease and prices fall in Paris. The result will be that people will be encouraged to buy more in Paris, where prices are low, than in London where prices will be high. So the former balance of trade will be reversed. An unequal balance of trade calls into play forces that tend to correct that balance.

But shipments of gold are expensive, so that the post office

will try to check the process which may render this necessary. It can do this by varying the rate of cost of postal orders (that is by varying the rate of exchange). For example, if the balance of trade is equal between the two towns, then the two post offices may charge, let us say, 2*d.* for a £1 postal order. When Paris begins to buy from London more than London does from Paris, then, because there will be a demand for orders on London, Paris will put its price up till it reaches Gold Point—if it costs 1*s.* to send the £1 then the Gold Point would be £1 1*s.* 0*d.*

If the rise of the rate of exchange to gold point does not stop the demand for money orders, then Paris will continue to sell its orders at that price and *send* the gold to London. The rate of exchange cannot go beyond the gold point, as long as there is gold available. For if Paris charged above that price, then those who had debts to pay in London would send the gold themselves.

London, too, can help to redress this adverse balance by encouraging people to buy orders on Paris by selling them at a discount. It might charge 1*9s.* for a £1 order on Paris. In both towns then the Rate of Exchange has reached Gold Point but in London it is the Import Point whereas in Paris it is the Export Point. It is obvious that when the Gold Point is at the Export Point at Paris it will be at the Import Point at London.

One cause then of the variations in the rate of exchange is the relative indebtedness of the two countries. Another cause is the Rate of Interest charged in the two countries, that is the relative price of money. For example, if the demand for money becomes keen in Paris (owing to a trade revival) and as a consequence the Rate of Interest rises to 5% while in London because trade is stagnant the Rate of Interest falls to 2½%, then it will be profitable for financiers in London to call in their money earning only 2½% and send an order to Paris, there to be cashed and earn—on investment—5%. But an increase in the demand for orders will result in an increase in

their price—that is by a rise in the rate of exchange. In addition the increased supply of credit in Paris will cause a rise in prices and the decrease of credit in London will cause a fall in prices. The exchange may therefore adjust itself without any shipments of gold. Nevertheless, the tendency to gold shipments was shown by the variation in the rate of exchange.

A further complication may now arise. The London merchant now deals with Berlin, and Berlin, being in need of gold, begins to inflate its currency by printing paper money, which in Berlin is legal tender. This, it has been seen, soon results in a rise in prices. Consequently people will cease to buy in Berlin and buy more in London. The Berlin merchants will, in order to pay for their increased purchases in London, buy bills and send them to be cashed in London. Consequently the cash balances in Berlin will be increased and in London diminished till it may be necessary to send gold from Berlin to London. This will in turn cause a fall in prices in Berlin and a rise in prices in London. But the issue of paper in Berlin continues and is in Berlin legal tender. Eventually then it becomes impossible to continue the sale of bills on London, for no gold can be sent.

Berlin may attempt to ease the situation. She can buy goods (say, cutlery) with her notes and send the goods to London to be sold and so obtain gold. But this will only create two new difficulties. First—bills will now become dearer still, for the expense of shipping goods and selling goods is far greater than that of sending gold, so that the exchange will soar far higher than the gold points for export. Secondly—Berlin will have to buy its cutlery in Berlin, where prices are already high, and sell them in London where they are relatively cheap. Further loss will then result from this transaction.

For example if goods cost 20.42 marks in Berlin and £1 in London and if the expense of sending gold is 1 mark, then in order to realise £1 in London, Berlin will be prepared to spend 21.42 marks. But prices have risen in Berlin and what

formerly cost 20.42 marks now costs 40.84. She has no gold; to export these goods costs not 1 mark but 3 (they are bulkier), so that 43.84 marks are now needed to pay for £1. But she also finds that when these goods are sold in England where goods are cheap, they are worth only 18s. So that even more goods will have to be sent to pay for £1. The Export Point has now risen to fantastic figures.

As the issue of the paper money continues so the exchange will rise. When therefore a country is suffering from an over-issue of paper money, its exchanges will depend on the price which its principal exports sell for in gold, in foreign markets, as compared with their price in the home market. This may be still further complicated by tariffs preventing free export or free import.

To complete therefore the whole rhythm—if England has been buying abroad more than she has been selling—so that the exchange is against her—it becomes cheaper to send gold than to send bills. With less gold, banks will have their reserves depleted and will restrict advances so that prices will fall. But prices will rise in those countries to which gold has been sent. The fall of prices in England will stimulate purchase, so that exports will increase. (Especially, too, will foreigners take the opportunity of buying stock-exchange securities.)

The rise in prices in those countries receiving gold will check their exports. The tendency of England, then, to buy more than she sold, which caused the unfavourable exchange and the export of gold, will be reversed. She will now buy less and sell more, and the balance between the claims against her and the claims for her will be restored. As a consequence bills will be more plentiful and cheaper in England and dearer abroad. The necessity for sending gold will then disappear.

The rate of exchange then supplies a very good indicator of the relative indebtedness of the various countries. And so it is that international payments are settled by cancelling out competing claims through the medium of the bill of exchange.

CHAPTER XIII

THE NATIONAL INCOME

THE most successful application of science to industry has been in the realms of production. Some economists have even suggested that at last the problems of production have been solved. For almost every day sees newer methods of organisation, better machinery, closer specialisation, more rapid transport, applied to industry, which results in increased production and cheaper goods. Industry has been smoothly responsive to every demand.

In the realms of distribution, however, the problems awaiting solution are still urgent. Now what is there to distribute? between whom? on what terms? by whom?

It is obvious that only that can be distributed which has been produced. Production, it has been seen, is the creation of utilities, and in modern economic life these utilities are exchanged. Because they are exchanged they have to be valued, and it has also been seen that they are valued in money terms. So that it would appear logical to assume that, if we knew the value of the utilities created by any community, then we should know the amount available for distribution among that community.

But in order to create these utilities—and to continue the process of production—allowance has to be made for depreciation. Without such an allowance, the ultimate return from any industry will deteriorate. The Gross Product of any industry comprises two parts, one which is used to replace capital, and the other which is the Net Product. Consequently that which can be distributed as Income among those who have contributed to production is the Net Product of the industry.

For example, if the Gross Product of any industry was valued at £1000, then of this £1000, a sum (let us say) of £100 has to be put aside for depreciation of the tools, of the machinery and of the plant generally, and another sum of (let us say) £200 with which to buy the raw materials of the industry, before the Net Product of the industry can be arrived at. In this case it is £700 and it is this Net Product which can be distributed among those who contributed to its production.

To take a simpler case. A boot-maker starting with leather valued at 5s., makes a pair of boots which are valued at £1. The utility he created therefore has a money value of 15s. For he would have to use 5s. with which to buy more leather (this is without allowing for the depreciation of his tools, which ultimately will have to be replaced).

Now all those in the community who co-operate to produce, both owners who lend their property and workers, create utilities. The sum total of the Net Products of all the industries in the realm comprises the National Income.

Sir Josiah Stamp defines the National Income as "the aggregate money expression of those goods produced and services performed by the inhabitants of the country in a year, which are in fact generally exchanged for money." Dr. Marshall defines it as the "aggregate net product of, and the sole source of payment for all the agents of production."

The National Income is therefore the sum of the Incomes owned by all the persons who inhabit the national territory. Whatever the figure of this National Income may be, it will represent riches or poverty according to how many people have to share it.

There are, however, two great difficulties in measuring this National Income. Of the goods produced by industry, some are "production" goods and some "consumption" goods. So that the first difficulty is, what is one to add up? For example,

in order to produce boots, leather is needed, machinery, and buildings in which to manufacture. Shall we add up the leather (which had to be produced) and the machinery and the buildings and the boots? They are all utilities created by their own special industries. Yet, to do so would involve counting some things more than once and that would, of course, falsify the sum arrived at as the figure of the National Income. It would be far more accurate to count all commodities produced only once, and that in their completed state, ready for the final consumer. It should, in other words, only include consumers' goods and not producers' goods. For producers' goods are only valuable because they ultimately satisfy the want of the final consumer.

Even this does not solve the difficulty and again complicates the final calculation. There are many cases in which it is difficult to decide whether commodities are producers' goods or consumers' goods. Iron is used to make the machine, the machine is used to make the boots. Here the boots are the consumers' goods and the value of the iron and the machine is not to be counted as part of the National Income. But if oil is "mined," it can be used to lubricate the machine, in which case it is to be counted as producers' goods or it might be used to light our houses, in which case it is consumers' goods. A farmer may have a stock of oats. If he consumes it himself it is consumers' goods, if he gives it to his plough-horses it is producers' goods.

The second difficulty arises from the fact that wealth or income is in fact unequally distributed. For example, the desire for Rembrandts, or for diamonds, or for first editions, satisfies wants and they are therefore forms of wealth. But their values are high because those with large incomes are prepared to pay highly for them. If these people's incomes were lower, they would offer a lower price for these commodities, but that would make little difference to the actual commodities themselves. The same reasoning would apply to most luxury

commodities which appeal to those with large incomes. Rembrandts and first editions are already there. If they were valued at a lower price, neither production nor consumption would be affected. So that whilst inequalities of incomes exist, if we added up the commodities and services at these higher prices, the result would differ greatly from that which would result from an addition of the prices of the same commodities, if incomes were more equal.

For these reasons it is very difficult to give an exact and unchallengeable figure to the National Income. Nevertheless, with careful calculation, it does serve as an Index of the national wealth. If we obtain similar data for other countries it serves as a basis of comparison between the wealth of different nations, or of the same nation at different periods. Is, for example, England richer than India? Is England growing richer or poorer? Only by such a calculation can these questions be answered.

For obviously the National Income is not a fixed and static amount. New capital, better organisation, greater skill, will always increase the Income of the nation. Producers have not to fear that their share of the National Wealth is a rigid quantity. The more they produce the more there is to be divided. Wealth is a flow, for producers consume wealth as well as produce it. Any additional product which is produced is always demanded, for the very simple reason that the producer is only producing to satisfy a want, a want, that is, for the additional product. So that any increase in the product implies in fact an increase in payment. The intrusion of money rather conceals this aspect. But to take an example. If some form of specialisation had grown up among the shipwrecked mariners of Robinson Crusoe Island, then an increase in the production of boots would imply an increase in the demand for hats, for which boots were exchanged.

Because wealth is a flow, society is able to absorb in its industrial system the annual increase of population. For

"with every mouth God sends a pair of hands"—they come as producers as well as consumers.

The National Income or the National Wealth is (because wealth is a flow) a constantly changing figure. It is not, we have seen, a mere inventory of all the goods of the community. And indeed as goods are consumed, so are other goods produced. Generally producers' goods wear out (are consumed) more slowly than consumers' goods, but ultimately all goods wear out, all goods are consumed. Capital, it has been seen, is simply that part of wealth which is used for further production. In calculating the amount of the National Income, it has been seen that allowance must be made for the constant renewal of this capital, which is essential to the productivity of society.

So far, however, only material commodities have been considered—the machine, food, boots, the motor-car; that is material wealth. Economists agree that wealth is anything that satisfies human wants and is not unlimited in quantity. But what is the use of the machine, without the knowledge to work it? or of the food, if one is too ill to digest it? or of the motor-car if it cannot be driven? Skill and knowledge, then, satisfy wants too, they too are wealth. Without them, material objects may become worthless. Of what use is the dentist's drill without the dentist's skill?

If, then, in the effort to arrive at the amount of the National Income, only the cost of the dentist's drill is given other problems emerge. The drill itself is worthless without the ability to use it; in addition it may be worn out or out of date. Consequently then the value of the drill will depend on the income that it will give—its value is derived from its income. Its value, then, can be obtained by capitalising its income—that is by calculating the sum of money which at the given rate of interest will give an income of the same value as the drill (or the machine or the motor-car).

In a similar way the value of the skill of the dentist (or of

the doctor or of the engineer, or of the artisan) is determined by calculating what sum of money will give an income such as the skilled person enjoys. The present value of a house, for example, is not what it cost to build but the rent it yields (that is its income) multiplied so many times.

From this point of view the wealth of a country can only be measured by calculating its income, not by totalling up the value of the goods (even if only consumers' goods were included) which at the moment it may possess.

Now we work to satisfy wants. Those goods and services which satisfy wants constitute wealth. The problem now arises, how far is this wealth any index to the *welfare* of the community? In addition, how far can the figure of the National Income be used to compare the wealth of different peoples and of the same nation at different periods?

Wealth and welfare are indeed very closely related. A person with greater material wealth also generally enjoys greater welfare. He enjoys more leisure, he can work at tasks which are more congenial, he can cultivate certain refinements. As his wealth or income increases (or decreases), then his welfare increases (or decreases). For a person's true interest lies not in his money income nor even in what his money income will buy, but in the possession of goods and services, in his economic welfare. His income and his possessions are only a means to his well being.

But related as wealth and welfare are, there are nevertheless three important considerations to note which do not make them identical. First, the growing body of social services tend to equalise welfare, for poor and rich can now enjoy the advantages of clean water, good education, street lighting, open spaces. Museums and picture galleries are open to all, and help to make welfare in no way proportionate to wealth.

Secondly, a person with twice as many goods and services as another, that is with twice his income (for income is the power to demand those goods and services) does not enjoy

twice his welfare. This is true because of the Law of Diminishing Marginal Utility; for when a person already enjoys a certain income, every additional unit added gives him a less proportionate satisfaction. It is true that in the case of money the decline in its marginal utility is less rapid—because a larger number of diverse wants can be satisfied. But even here the limit is soon reached and all that can be done with it is to save it. Additional units of income then bring less than a proportionate amount of welfare, so that again income is not proportionate to welfare.

Thirdly, another factor has to be considered—how the income has been obtained. The amount of toil and trouble spent in obtaining the income, in other words the amount of Subjective Costs or Dissatisfactions, has to be taken into account. For example, the same amount of income can be obtained from work as from lending property. Those who have to work are obviously the less well off. Even among those who work for their incomes, some have greater leisure than others, some work in pleasanter surroundings, some work is more dangerous, some work is less exhausting. Income and welfare will not correspond when the incomes are obtained by such widely differing methods. The growing study of industrial psychology and the introduction of welfare work in the better equipped factories indicate the effort which is being made to reduce these Subjective Costs of industry. In any case, without a knowledge of these Subjective Costs, income by itself will be no true index of economic welfare.

There are a few other, if minor, factors which also have to be considered and which help to make income and welfare not quite identical.

A person's income will not be a true picture of his economic welfare, because some persons have greater responsibilities than others, some are healthier than others and require less to spend on doctors' bills, some may even spend less wisely than others. The same income will therefore bring different satis-

factions to different people. Even needs may vary; according to one's standard of life, one's upbringing and one's sense of duty to the community as a whole (some subscribe to a hospital, others to a political party or to a football club). Those who in addition to receiving an income either from work or from lending their property, have for example their own house to live in, or receive gifts of any type in addition to their money income, or those who from the nature of their work receive additional emoluments (such as for example the warden of a hostel or head of a college, who receive free housing and lighting) will all receive an income which will not be an accurate index of welfare.

The National Income, it has been seen, is but an index, a rough index, of the economic welfare of a people. We have seen:

1. How difficult it is to obtain any accurate figure of the National Income,
2. How difficult it is to measure welfare by income.

This will make the National Income a very debatable measure of national welfare. Is it then possible to use the estimated incomes of various nations as a basis of comparison of the wealth or welfare of different peoples?

If the distances of space and time become too great or if the civilizations are very diverse, then these indices are of little significance. Is England wealthier than India? Is the welfare of English folk greater than that of Indian? The very standards of the inhabitants make a comparison difficult. Climate and custom may permit an Indian to go bare-foot, Hindus have no animal food, most of the people are still illiterate. Any comparison, then, based on the values of such English wants as beef and boots and books will be misleading.

Similarly, how can we measure whether England or Englishmen were better off in 1932 than in 1032? Most of the wealth of Englishmen to-day consists of commodities and services of

which an Englishman of 1032 had no conception, and on which therefore he could not set a value.

Between peoples of similar civilizations and over short periods, the idea of a National Income can prove very fruitful. It gives some measure of comparison of economic progress and makes possible some measure of comparison between the economic welfare of the Englishman, the Frenchman and the American. It enables the economist to analyse economic society.

This raises a problem which has been touched upon already. What are the causes of the variation between the wealth of different people, or of the same people in different periods? Ultimately it will of course depend on the efficiency of the factors of production, on the efficiency of the land, labour and capital, and of the organising ability and the success at risk-taking of the inhabitants.

The more fertile the land, the richer the mineral deposits, the better placed for trade, the better the natural communications, the wealthier, on the whole, will be the inhabitants than if they dwelt in a barren and inaccessible land. The climate may be so hot as to be enervating, or so cold as to dull all effort. The gifts of nature will therefore have a very important influence on the wealth and the welfare of the people.

The cleverer and the healthier the people, on the whole the wealthier will they be. A people whose age-composition, on the average, is in the middle years of life will be more productive than a population whose age-composition is, on the average, very young or very old. So too, the greater the ability of the industrial captains and the greater the enterprise and the foresight of its organisers of industry, the greater will be the wealth of the community. The volume of wealth will depend on the education of the people, on how far they will be able to adapt themselves to new industrial methods and needs. The size of the national income will also depend on

how close the population is to the Optimum Number for that area. If the organisation of the community permits merit to reap its reward, then it will be wealthier than a community in which leadership and rewards are largely hereditary in character.

Also a nation of monks or fakirs, absorbed in a contemplative life, that is seeking spiritual wealth, will be *materially* poorer than a nation occupied in creating material wealth. Ultimately of course wealth is an ethical entity and ethics, and not economics, ought to decide what should be the ultimate pursuit of a people. Economics and ethics are not antagonistic sciences, for in fact they are intertwined, but the study of economics takes for its sphere the pursuit of material wealth.

The wealth of a community will depend, too, on what people have done in the past, and are doing in the present to provide for the future. If its capital equipment is up to date, if its machinery is adequate, if its soil is scientifically cultivated, then the community will be the wealthier for it.

Lastly, the Government of the community can help in the production of wealth by maintaining a requisite standard of law and order, by protecting property, by safeguarding life; for the organised community can use its government deliberately to help material prosperity.

The Income of a Nation is, of course, divided between all those who have contributed to its creation, that is to say between its organisers, its risk-takers, its manual and mental workers and its owners of land and of capital. The divisions are generally known as Profits to its organisers, Interests to its risk-takers, Wages and Salaries to its workers, Rent to its land-owners.

The distributor is simply the business organiser. He *employs* land, labour and capital. He makes individual bargains with landowners, employees and capitalists, contracting to pay them for their services and calculating ahead what, after paying them, will be the return to himself.

He contracts to pay them so much according to *their* worth to him. Their worth to him will depend on how far they contribute to production. Their productivity will depend ultimately on whether the consumer wants their product (at a price). Whereas all other payments are contractual, his alone is not—the return to his service of enterprise and organisation. His profits will depend on the success of his organisation, on the success of his enterprise, on the success of his estimation of people's wants.

CHAPTER XIV

RENT: THE VALUE OF CONCRETE CAPITAL

A LARGE proportion of the income of people goes to pay for the use of the house in which they dwell, or in the case of business people, for the right of occupying their offices and factories. In common speech, this payment is called Rent. If, however, this payment is analysed, it is found to contain a variety of payments.

The occupier of the house has to pay a general rate to the local authority and a water rate to the water board; he has to pay the landlord so much every week, in return for which the landlord agrees to do the necessary repairs (this is a kind of Depreciation fund); the building has cost money to construct and the occupier may be paying the ordinary rate of interest on the capital sunk to build the house (or office or factory); lastly the occupier has to pay for the land on which the fabric was built.

The ordinary term Rent would therefore include

1. Rates
2. Payment for depreciation
3. Interest on the money sunk in the construction of the building
4. Payment for the use of the Land on which the building has been placed.

According to the Classical theory the only actual Rent in this combined payment is the payment (if it could be disentangled) for the use of the land.

It was Ricardo and his followers who formulated the Theory of Rent and gave to it its economic importance. He was faced

with the problem of why such payments as Wages, Interest and Rents are made. Profits he did not count as a payment, but merely as the difference between the cost of production and the selling price of the finished goods. Now, he argued logically, a wage was the payment made to induce people to work. Interest was the payment made to induce people to save. But why was Rent paid? What did Rent induce? It could not induce land, for land was already there and would still be there, even if the owners received nothing.

The Ricardian School of economists held the Cost of Production Theory of Value; they held that the value of an article was determined by its costs of production (that is by the cost of the land, labour, and capital which in combination was required to produce it). But they were logical and went back further. What, they asked, was the cost of production of the land, labour and capital? Upon their answer, they attempted to find the principle on which the distribution of incomes between the owners of land, labour, and capital was based.

They therefore argued that Interest was the cost of production of capital—that is, that Interest was the inducement for people to save, that Wages was the cost of production of the labourer (notice how they confused labour with the labourer). But what was the cost of production of land? It was there without any cost. Then why was Rent paid? How is the amount of Rent determined?

Ricardo thought that he had solved the problem when he analysed the term Rent as a factor of production. He noted that land has two peculiarities

1. It is limited in quantity
2. It possesses natural variations in quality,

and he came to the conclusion that Rent “is the payment for the original and indestructible qualities of the soil,” a definition which was later widened by Dr. Marshall to “the income

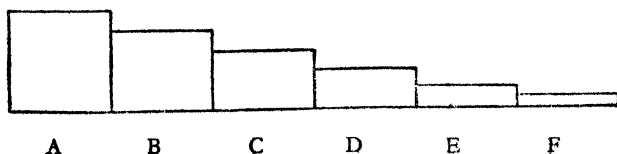
derived from the ownership of land and other free gifts of nature."

Ricardo came to this conclusion by observing certain data. Imagine again our Robinson Crusoe Island. The first Crusoe lands and very naturally he occupies and cultivates the most fertile piece of land. As more shipwrecked mariners land, then very naturally too, each occupies and cultivates a less fertile stretch than his predecessor. The result is that although each may work with the same skill and the same outlay of capital, the first Crusoe, simply because he has the most fertile land, will reap the greatest return. The output from each plot will diminish in proportion as the fertility of each plot diminishes, until a point is reached when the person who owned the most infertile plot finds it not worth while cultivating his plot at all. The land that is just worth cultivating Ricardo called the "Land on the Margin of Cultivation."

As the population and the demand for food on the island grow, then two results follow:

1. Those who occupy the more fertile land will, of course, sell their products at the same price as the person who owns the land on the Margin of Cultivation. They will therefore receive far larger returns. The person on the Marginal land will set the price, for if the price were lower he could not cultivate his plot.

2. As population and the demand for food continue to grow, more infertile land will be pressed into cultivation and the greater, therefore, will be the return to those whose lands are more fertile. The payments made for this original and indestructible nature of the soil is Rent.



Imagine these six plots of land on the island, of which plot A is the most fertile, descending in fertility to plot F. At the price ruling for food, the owner of plot F finds that it just pays him to cultivate his land. Because plot E is more fertile the owner, with the same expenditure of effort and capital, will secure a larger output, which, at the price ruling, will give him a higher return. That is his Rent. The owners of plots D, C, B, A, simply because their plots are of greater fertility still, will produce still larger crops and they will therefore secure even greater returns. All the returns above that received by the owners of the land on the Margin of Cultivation are Economic Rents.

As population grows and the demand for food increases, so do Rents rise. And this Rent, be it noted, is not due to any efforts on the part of the owners of the plots, but simply to the fact that their land is naturally superior to the land which just repays cultivation.

In actual society, this crude example of the Ricardian theory of rent is complicated by other factors. Land may be very fertile and yet far removed from any great centre of population. So that it may actually happen that fertile land which is distant from a market will be left uncultivated (for the expense of transport will more than counteract the advantage of natural fertility) while land not so fertile, but nearer the market, will be highly cultivated. Here too, however, the land, so accessible and well situated, has the advantage over land not so well situated. It enjoys a natural advantage, similar to the natural advantage of greater fertility. Consequently there is a Rent element in payments for the product of such lands. In one case there is a payment for Fertility, in the other, for Accessibility or Situation. The owners in one case enjoy and receive a Rent of Fertility, in the other a Rent of Accessibility, or of Situation. It is of course the growth of transport—the tramp steamer, the opening of the Suez Canal and so on, which has brought to the English market the products of the

fertile lands of North America and of India. In thickly populated areas the advantage of situation may even be more important than the advantage of natural fertility.

Again land is not only a source of food. Houses and buildings and shops are erected on land. Now a shop built on, say, a Bond Street site in London, will give a far greater return than a similar shop, say, on the downs of Sussex. There will be a similar gradation of sites downward from the Bond Street site, to the City shop, to the shop in Greater London, on to the shop in the suburb, to the shop in the small country town, to the shop in the village, on to the shop (if ever built) on the Downs. In every case, more business is done on the better site. The same article will sell for more in the West End than in the suburban shop. The same hat will cost more in Bond Street than in the village shop. In such cases, the owners of the better placed shops receive advantages due to position. They too receive a rent—the Rent of Situation. Like fertile land, the best (or fertile) sites are limited in quantity or they have the advantage of peculiar accessibility. The owners of these shops—or of such offices or of well-placed factories—receive rewards which are the outcome of differences which are not due to the efforts of owner or user. They receive Economic Rent.

There is still a further case needing consideration. If a virgin plot of land has labour and capital applied to it, it will yield a high return. Now the same amount of labour and capital applied to the same plot will in succeeding years give a decreasing yield, after diminishing returns begin to operate. For equal successive amounts of capital and labour applied to the same land will, after a certain point has been reached, begin to yield less than proportionate returns, or what is the same, equal yields will only be obtained from the same land at increasing costs. Consequently just as there is an Extensive Margin of Cultivation when cultivation can be spread over a wide area so there is an Intensive Margin of Cultivation when cultivation is confined to the same area. The Market

Price just pays for the costs of raising the last yield. The previous yields, simply because the land was not so near to exhaustion, will therefore have been greater. The difference will be a Rent, for the owner will secure a return which is due to differences over which he had no control.

The same principle of a rent from the intensive cultivation of land can be applied to land used for building purposes. Skyscrapers can be raised only at increasing costs and risks, and there is obviously a limit to their height.

So that whether land is used for growing food or for building purposes the same two processes go on: (1) Increasing the area under cultivation or the area for building purposes; (2) increasing the expenditure of capital and labour on the same area, whether the area be used for food-growing or for building purposes. In both cases it enables the owners who have the advantage of site, or of fertility, or of accessibility, or even of priority to take the difference in Rent. And as population grows and the Margin of Cultivation recedes to inferior lands and to inferior sites, so Rents rise.

Consequently, Ricardo reasoned, Land has no Cost of Production and Rent, therefore, does not enter into the cost of production. Unlike interest and wages, Rent does not determine Price but Price determines Rent. As Ricardo put it: "The price of corn is not high because Rent is paid, but Rent is high because the price of corn is high, and it has been justly observed that no reduction would take place in the price of corn although landlords should forgo the whole of their rent." His reasoning is simple and logical. In our diagram land F is on the margin of cultivation. The produce of this land is needed, and so people are prepared to pay a price for the product, which covers the cost of capital and labour expended. Now land D with the same application of capital and labour will yield a larger return, simply because the land is naturally more fertile. The price of the product per unit will be the same for the owner of land F as for the owner of the land D.

Therefore the rent of the owner of the land D is high, because the price of his product is high. The rent of the owners of the lands C, B, A, will be higher still, for the fertility of these lands is higher.

The same reasoning would of course be true, if "accessibility of land" were considered instead of fertility. The most accessible land has the greatest natural advantages, these advantages decreasing until the land on the "margin of accessibility" is reached. All land above the Margin of Cultivation or of Accessibility will enjoy a rent, all lands below the Margin of Cultivation or of Accessibility will not be cultivated.

This conclusion is equally true when applied to Urban Sites. Our shopkeeper in Bond Street does not charge high prices because his rent is high. His economic rent is high because he can charge high prices. *If he ceased paying his high rents, he would still charge high prices.* Even if it were contended that he would not charge higher prices than elsewhere if his rent was abolished, his advantage in situation would enable him to *sell more* and so secure greater returns.

In all cases, then, rent is the outcome of differences which are not due to the owner and is therefore independent of any payment to the owner. As Ricardo again puts it: "Rent is the difference between the produce obtained by the employment of two equal quantities of capital and labour." Consequently while interest and wages influence the price of the product, rent has no such influence. Rent in other words is "price-determined, not price-determining." It depends mainly on demand, for it is the return to land, which is a factor of inelastic supply.

If this theory of rent is applied to actual conditions, it is confirmed as well as apparently contradicted. For example, during the War, foreign supplies of food were difficult to obtain. Consequently home farming was encouraged and the increased demand for English produce caused prices to rise, and farmers to cultivate more intensively, even to extend to inferior lands.

As the land on the margin of cultivation receded so did rents rise and the landowning interests benefited. With the coming of peace and the entry of foreign corn supplies, land has again gone out of cultivation. And as the Margin rose, so rents fell. The Economic consequences of these changes have been softened, by Government control of rent, in Rent Restriction Acts; as well as by the long term contracts into which farmers enter. But the Ricardian Theory of Rent is nevertheless quite evident.

The contradiction appears in the statement that rent does not enter into the cost of production, whereas every farmer and every business man knows that his rent is as much an item in his cost of production as his wages bill or the interest on his borrowed capital. However, while it is true to say that to any individual farmer or business man, because he has to pay for the use of his land, rent does enter into *his* cost of production, the same is not true of society as a whole.

Society as a whole is mainly concerned with the minimum price it has to pay for its food or its goods; and that price depends on the cost of production on land on the margin of cultivation, or on the factory on the margin of production, or on the shop on the margin of situation. *If the price were to fall below this minimum price then this portion of product would not be produced.* But society needs it, for without it its effective wants will not be satisfied. Therefore all land, or factories, or buildings which have advantages of fertility or of situation will receive a higher return, at the price ruling. Since the price is fixed on the margin, their superiority will enable them to grow or sell or make more. From the point of view of society then, if rents were not paid, the total amount of produce would not be diminished, for the market price is sufficient to induce production on the marginal lands, and on the marginally situated factories and shops. The payments which the owners of the better lands or of the better situated lands or buildings receive depend on the price of the product--neither the price nor the output would be different if the

owners did not receive this Rent.

The Ricardian Theory of Rent has also been attacked from other angles. It is contended that in England there is no "no rent land," no land on the margin of cultivation, for some rent is paid even for the worst lands. This is not a powerful criticism of the Ricardian Theory of Rent. For first, the payment for land, which in fact may be on the margin of cultivation, may be only payments for the capital sunk in the land over a long period of years. It would be the interest on the money spent on ditching and dyking, on manuring and improving. Payments for land in the Fen Area, for example, might consist wholly of the interest on capital so sunk. Secondly, even if there were no "no rent land" in England, that would not invalidate the theory. For the British public is served by the world and British farmers compete with foreign farmers. Consequently the marginal lands for England might be in Manitoba, or in Russia, for English lands would enjoy the advantages of accessibility and situation, and the payments made would therefore be a rent of accessibility. Thirdly, because land in England has been cultivated for so long a time, the margin of cultivation would also be an Intensive one within, as well as an Extensive one without. Fourthly, no farmer has the same quality of land throughout his farm. His lands are mixed, fertile and infertile, arable and pastoral. Of course he will use each portion of his land for that purpose which will give him the best return. But he cannot pay rent for his fertile land and pay no rent for land that he may consider not worth while cultivating. He pays an inclusive rent for the whole farm—for the good and bad land combined. His payment therefore conceals the fact that no economic rent is paid for part of his land—for that portion which is below the margin of cultivation. His payment, at so much an acre, averages out the payment for land which is above, as well as for the land which is below, the margin of cultivation. Fifthly, if the supply of land is inelastic, the use to which land can be put

is very varied. It can be used to grow wheat or barley or oats, to build upon or to graze cattle on, as a game preserve or as an ornamental park, for playing cricket or for shooting grouse. There may, therefore, be several Margins. Land which is of no use as corn land or for building sites may be highly valued as a game preserve. Land which is of high fertility as corn land may be valued even more highly (by a person who wishes so to use it) as "private grounds." Very obviously, then, the exchange value of land may not be the best index of its worth to society—"the pheasant margin may be higher than the peasant margin," that is, more can be obtained from the same piece of land used for shooting pheasants than if used for corn growing or for cattle rearing. But land below the margin (if the purpose is stated) does exist.

Ricardo's Theory of Rent is therefore a penetrating analysis of the return which goes to one Factor of Inelastic Supply. He applied it to land alone. But the same logic can be applied to all the factors of production and it affords a useful help to the solution of the problem of distribution as a whole.

Already the term Land has been expanded to include "the gifts of nature", the climate above, the minerals beneath. There will then, very obviously, be a Rent element in all payments for these gifts of nature. For like land itself their characteristics are:

1. Their relative scarcity.
2. The variations in their quality.
3. The relative inelasticity of their supply—that is, that an increased price will not call forth a proportionate increase in the supply of the product. Lancashire enjoys a payment for her climate, the Champagne areas of France for their soil. The payments are in the nature of rent.

But the value of a Rubens, just like the value of the champagne, depends on its scarcity. Just as a greater payment cannot proportionally increase the supply of land, so a greater

payment cannot increase the supply of Rubenses. The inelasticity of supply of Bond Street shops may be of a more permanent character than the comparatively temporary inelasticity of supply of mourning goods during a mourning season, but in both cases there arise payments which are due to natural or social causes beyond the control of the owner. The payments are in the nature of economic rents.

Modern economists therefore, using Ricardo's reasoning, seek a rent element in Profits, in Interest, in Wages—wherever indeed there can be found *different levels of productivity which are the result of natural and social causes beyond the control of the individual.*

Now Capital can be found to have different levels of productivity, just as land has. For example the Fixed Plant of a firm gives a return which is Rent, for the income it gives depends on the price of its product, exactly as the income from land depends on the price of its product. The cost of the fixed plant will not decide the price. If the price of its product is high, then the machine or fixed plant will give the owner a large profit. If the price of the product falls, the machine will not be scrapped. Its value, indeed, will fall with the price of its product, but it will be kept until the price of the product will just pay the expenses of wear and tear. When it reaches the point that only bare expenses are just met, it is parallel to "Capital on the Margin of Cultivation" or "no interest capital." The value of fixed plant then, like the value of land, depends on the value of the product.

Let us imagine the case of a machine which cost £100—and which has been installed to manufacture wireless apparatus. If the demand for the wireless apparatus increases and the price consequently rises, then the value of the machine will increase.

The fact that the machine has cost £100 will not determine the price of the apparatus (its product). The value of the apparatus will determine the value of the machine. The value

of the machine is *derived* from the value of its product.

If the demand for the apparatus were to decline, the machine would still continue to make such apparatus till it *just* paid the owner to continue. The machine would then be on the Margin of Use. If the demand declined still further, until it no longer paid to produce, the machine would be scrapped. The machine would then have fallen below the Margin of Use.

Similarly, capital sunk in land, in ditching and dyking, manuring and fencing, shares with land itself the fact that its value depends on the price of the product. If corn is dear then the value of these permanent improvements in land increases, just like the land itself. When agricultural products fall in value, then the value of the capital sunk in the land falls too.

Again, if a new station develops a growing suburb and the land in that suburb as a consequence rises in value, then so does the house property built on that land. If the area decays, then the value of the house property falls too.

War, it has been seen, generally increases land values. But war also creates an urgent demand for shipping, for steel. As the price of transport and of steel increases, then the profits of shipowners and of iron founders increase. In the long run of course more ships and more furnaces will be built, but during this temporary inelasticity of supply" there will be real "scarcity value" of ships and of furnaces compared, for example, with the value of boots or furniture. Until supply has accommodated itself to the new demand, the extra value will persist. And the extra value, be it again noted, is dependent entirely on the price of the product. It rises and falls with it just like land values. To these payments for factors of inelastic supply of a *temporary nature*, the name Quasi-Rents is given. Quasi-Rent then is the payment for the use of those agents of production the supply of which, although alterable or elastic in the long run, is fixed for a short period. If Rent is the yield from "the original and in-

destructible qualities of the soil," then Quasi-Rent is the yield from instruments of human production.

Lastly, it has been seen that Rent is the payment for scarcity. It is the payment which is due to the limitation in quantity of an agent of production. Now this scarcity may be due to natural or social causes, as for example the *natural* scarcity of fertile land or the *social* scarcity of Bond Street sites. But this scarcity or limitation in quantity may also be artificially created by a monopolist. So that scarcity or monopoly values, whether natural or artificial, contain rent elements.

A large part of payments then which pass under the name of profits contain elements of *economic* rent.

In interest, too, rent elements can be traced. Rent, it has been seen, is the payment for a factor of inelastic supply. Now over industry as a whole, a change in the rate of interest (as distinct from a change in the rate of interest offered by a particular industry) will not seriously affect the supply of capital. In a society where inequalities of wealth exist the large savers are the wealthy. Business folk too will save, but they will re-invest their savings in their own industry. The wealthy, then, will save irrespective of the rate of interest offered. Those who save to provide against the accidents of life or against old age might even make special sacrifice and save more if the rate of interest dropped. On the whole then, the Rate of Interest, regarded as a payment for the use of capital, does not greatly influence the supply of capital as a whole. Just as rent does little to influence the supply of land, so interest does little to influence the supply of capital. Like land, invested capital then has different levels of productivity which are independent of payment. Like land, the quantity of capital is independent of the payment made. Like land, the value of invested capital depends on the value of its product.

Lastly, a rent element is to be found even in wages. Just as there are different levels of productivity in land so there

are different levels of productivity in labour. Just as the fertility of land is unaffected by any payment, so in many cases is the native genius of man unaffected by payment. Many a genius has lived in poverty, his gifts have been in no way dependent on any payment. It is as much due to native endowment as is the fertility of the soil. His natural gifts whether of voice, of brain, of touch (as singer, scholar, musician) give him a return which is a rent—a Rent of Ability. For his genius would still be there if no payment were made and payment indeed cannot improve it or evoke it—just as the fertility of land would still be there even if no payment were made. If wage payments evoked productivity then people receiving similar standard rates of pay, such as civil servants and teachers, should do correspondingly similar work. But some are more gifted than others and will do better or more work. To these, the wage payments are not the only incentives.

There is, then, a similar variation in the productivity of workers as there is in land. Just as in land there is an ascending scale of productivity from the land below the margin of cultivation to land of extreme fertility, so there is in labour. Even the most casual labourer has to be paid a subsistence wage. If labourers were paid below this subsistence level scarcely any labour would be evoked. These can be regarded as being on the Margin of Production. As the ascent is made, higher wages may be due to special training, as in certain trades and in professions. Here the higher payment may be regarded as akin to the capital sunk in permanent improvements on the land. Another class of wage-earners would receive incomes which are higher than the subsistence wage level owing to some artificial or social restriction, such as obtains among those who have special educational opportunities or the social advantage of birth or distinction.

Why, for example, is the wage of a lawyer so much higher than that of a labourer? He may have capital sunk in his

longer training, but even if the interest on the capital sunk has been allowed for, there is still a wide disparity. For example, if it took five years to train for the legal profession and it needed an outlay of say £2000, then at five per cent. he should receive £2 per week more than the untrained labourer. His income, however, shows a far greater inequality. The labourer may have the same capacity as the lawyer but the latter has the advantage of the opportunity of becoming a lawyer. His return therefore contains a rent element—the Rent of Opportunity. Lastly, there is the genius who enjoys a Rent of Ability. Like land, his value will depend on the value of his product. Like land, no increase in payment will make his genius (or fertility when applied to land) the greater.

This theory of wages is not incompatible with the more orthodox Marginal Productivity Theory of Wages. It does however draw attention to two salient facts of our economic society. First, that a great amount of work is done from no motives of payment at all; that is, that human beings do not act entirely from economic motives. Secondly, it draws attention to the inequality of opportunity, which is one of the chief causes of the inequalities of income.

This analysis of Rent leads to certain practical proposals. Some payments induce production. Some payments do not, for production would go on without any payment.

The payment of rent, it has been seen, does not affect the supply of land, but, although in a less degree, neither does the payment of interest affect the supply of capital, nor the payments of wages affect the supply of labour. Consequently economic rent could be withdrawn from those receiving it without affecting production and the flow of wealth.

Now the first aim of any system of sound taxation is to raise the necessary revenue without checking the production of wealth. Such would be the case if taxation could be concentrated on the rent element in all incomes.

CHAPTER XV

WAGES—THE VALUE OF WORK

WAGES are the inducement offered by society to people to work. They are therefore payments for work done. The income obtained from labour is called by other names besides wages. It is also known as Fees or Salary. What differences are there?

1. A Fee is generally the payment for a direct personal service. A doctor, a solicitor, a private tutor, charge a Fee for the services they perform.

2. A Salary is the payment for services which are not of such a personal nature. The salary may be paid monthly, or quarterly or even yearly. Generally those who receive a salary do not work so directly under orders as do those who receive wages. Salaries are always "time payments." Fees are generally "piece payments."

3. Wage is the income from work. It is generally applied to the return from manual labour. The amount of the wage is agreed upon beforehand, just as the amount of work to be performed is understood. A wage, then, is a contract payment to do so much work for so much pay. Generally, too, the work is done under orders and supervision, and the payment made after the work has been done.

Wages are paid in money. (Payment in kind, known as truck, has been forbidden by law.) The Wage Rates by themselves, however, important as they are, do not give a true index of the economic position of the worker. For the Wage Rates only tell us his Money Income and not his Real Income. His "Money Rate," that is his Nominal Income, may be high, but

if the level of prices is high too, then his Real Income may in fact be low. For the Real Income consists of the goods and services that the Money Income will buy. As changes in the price level do occur, great changes in the economic position of the working class may take place, of which the changes in money wages give no real indication. In the same way, before comparing wages of one country with those of another, allowances must be made for differences in the Cost of Living (or in the Price Level).

In addition, the mere Money Wage would not express how well off wage-earners were—even if allowance were made for the Cost of Living,—for other factors have to be considered. Some work is regular and some irregular. Some trades are seasonal, some trades go on all the year round. Some industries suffer more than others from cyclical fluctuations. The Real Wage in such cases is not the wage which is received when trade is regular or at “boom” or high pressure periods, nor the wage which is received in slump or slack periods, but rather the average weekly earnings over the whole period or cycle, or better still, the average wage which is received over a working life. For wages earned under high industrial pressure—a pressure which ages workfolk rapidly, may be nominally high, but actually they are low if the amount is calculated as an average over the possible working life of the wage-earner.

Again differences arise between the Real and Nominal Wage because some trades are more dangerous than others; in some trades conditions are such as to cause long periods of illness. Normally, wages should be higher in such industries and when they are, they can be regarded as payments for the great risks incurred. The money wage by itself will not give a true picture of the economic status of the worker.

Some work, too, may offer a man greater hope and a possibility of promotion. The initial wage may be small, but the ultimate prize is worth the struggle. In contrast to the work of the kind in which at 21 a man can earn the highest wage

possible, to the blind-alley callings which offer boys and girls a high wage for a short period only (dismissed as new juvenile labour can displace them—and which unfit them for regular work later on), Real Wages may be highest where the actual Money Wage is small, but where the prospects are brighter and where the sense of manhood can be retained.

In order to obtain the Real Wages received, there should be added, to some Money Wages, other payments which the work entails, a cottage in the case of the agricultural labourer, cheap coal to the miner, pensions to the teacher and the civil servant (although these pensions may be regarded as deferred payments), uniforms to the policeman and the postman.

The Real Wages are obviously higher in those crafts which offer their workers a shorter working day, or longer holidays or both, or in which it may be possible to supplement one's income by some other work in one's spare time, or where the actual conditions of labour are pleasant. (Of two clerks earning the same nominal wage, the Real wage is higher in the case of one whose work is in a well-aired room than in that of the other whose work is almost in a cellar.)

Some work too offers its employees greater independence than others or a higher social standing (*e.g.*, the work of a clergyman or schoolmaster) and these are part of the Real Payments.

In all cases then, it is necessary to distinguish the Real from the Nominal Wage of workmen; for the Real Income alone gives the true index to the economic status of the receivers. Dr. Marshall puts it "The attractiveness of a trade depends not on its money earnings but on its net advantages."

Just as the worker has to distinguish between his Real and his Nominal Wage in order to arrive at his true economic status, so the employer distinguishes between his Real and Nominal Labour Cost in calculating his estimated costs.

The Nominal Labour Cost is the actual amount of money paid out. The Real Labour Costs is the actual work which

the employer receives for the money paid out. For example, if an employer paid a man £2 a week and at that wage the man produced only mediocre work, it might be more profitable to the employer to pay £3 a week and secure both better workmanship and greater output. For *up to a point*, greater wages conduce to greater efficiency, and cheap wages may be ultimately dear wages. To make this case clearer. If a manufacturer employed 100 men at £2 a week and at that wage, they produced 200 units of goods; and he found that by paying his men £3 a week, they produced 400 units; he would gain by paying a higher wage. Wages may be high, yet labour costs low, just as wages may be low and labour costs high. For at a low wage the output will be poor and the labour costs to the employer high.

It is in this sense that high wages need not mean high prices for the goods produced. For high wages may actually result in low labour costs. If on a wage bill of £200, workers produce 200 units of goods, and at a wage bill of £300 they produce 400 units of goods, then the larger wage bill actually produces larger profits and cheaper goods. Wages are high but Labour Costs low.

Of course, workers work in combination with machines and their efficiency will depend not only on their own skill, and on their wage rates, but on the efficiency of the machines with which they work and on the efficiency of the organisation of the firm for which they work.

There is a further factor to be noted with regard to wages. Business men buy labour, just as they buy their machines, their plant, and their tools—for its productivity. (Note, however, they buy labour, not the labourer.) There is in other words a joint demand for labour and machinery (and land). On the whole, therefore, if the expenditure on machinery is large as compared with the expenditure on labour (as for example in the flour-milling industry), an increase in the wage bill will not cause such a large increase in the total costs

of production as where the proportion of labour to machinery is large (as for example in the mining industry). Consequently, where the overhead charges are high, an increase in wages will not be so difficult to secure as where the overhead charges are low.

The same relation of the Wage Bill to Overhead Costs explains why it is contended that it may pay business men to employ their men in shifts of shorter duration without any reduction in wages. The wage earner might gain in greater leisure, the owner would gain by a fuller use of his machinery (before it became out of date) and a reduction of overhead charges (heating, lighting, rent, interest) per unit of output.

Wages are generally paid so much per week. But the method of payments will vary generally between Time Rates and Piece Rates, with modifications to suit any particular craft. Whichever method is employed, it is reasonable to suppose that the employer will try to secure the maximum output.

Generally, Time Rates will be adopted—that is so much per hour or day—when the work is varied and not easily standardised, so that it is difficult to find a basis on which the workers' output can be measured. It is also adopted where the nature of the work entails periods of idleness, owing for example to weather conditions (such as the work of agricultural labourers and painters). And again it will be used where the machinery is so delicate and costly and where the work itself necessitates such care that if piece rates were paid it would lead to hurried and faulty work and injury to the machinery.

Most professional workers, who, we have seen, are paid a salary—civil servants, teachers, accountants, are paid Time Rates, because of the difficulty of measuring their work if they were paid according to output.

This method of payment has, however, been criticised on the ground that as good and bad workers receive the same rates, it offers no incentive to either to improve, that it may become difficult to secure promotion by merit, and that it

may actually lead to negligence and carelessness on the part of workfolk with consequent loss in efficiency to the worker and loss to the industry and of course to the owner.

To prevent such inefficiency and negligence creeping in, managers and foremen are appointed to see that time is not wasted, that the work is not neglected and wherever possible the output is tested.

The critics of Time Rates prefer Piece Rates—that is payment according to output. There is then no need to have paid overseers, each man will produce all he can under the spur of higher wages. It is argued that only by such a method can the superior worker be distinguished from the average and from the mediocre. In addition, as each man secures a wage according to his output there is a feeling of fairness in the factory. And the industry gains, for as each man, under the incentive of high wages, works as hard and as rapidly as he can, the output of the whole factory or industry is increased.

This, in its turn, has been criticised. It has been pointed out that men “over-work” in the effort to secure higher wages and that such effort ages men too rapidly and unfits them for work in middle age. In the factory too, such a method of payment fosters rivalry and ill feeling and leads to unhappy conditions of employment. Even the worker’s wage will vary, for it will depend on fitness and consistent good health and a variable wage will lead to an unstable family budget. Lastly, some industries do not lend themselves to Piece-Rates, for the product would suffer if work were hurried in order to secure larger output and a higher wage.

Within recent times other forms of payment have been experimented with. In order to improve the relationship between master and man as well as to add a sense of justice to the workers’ payment, it has been arranged that wages should depend on a Sliding Scale based on the output of the works or the price of the commodity. Wages, it is contended, will then bear some relation to profits and the sense of injustice

of the labourer will cease. For if the price of the goods is high and profits are high then wages will be high. If the price falls and profits decline then wages will fall in sympathy.

It is however pointed out that under such a scheme, wage earners may suffer through no consequences of their own. If the Management is faulty, work as hard as they may, the output will be poor. If the Marketing is inefficient, then although the effort of the workers will not vary, the price will be low and the wage poor.

Another form of wage experiment is the Premium Bonus System. There are a variety of such systems, but in principle they are all much the same. A certain output, within a certain time, is agreed upon. That is taken as the Standard Output. If anybody produces above that standard output a special premium bonus is given. The bonus may be given to an individual or, when groups work together, to the group, to be shared out among themselves. For example, if in a box factory it is found that a man working at his fastest can make six boxes an hour, then the standard output may be taken as four to the hour—for a man cannot work at full speed all the time. Now if a person's output in the hour is six boxes he will be paid for an hour and a quarter, although he has actually worked only one hour. Apparently the man has all to gain, especially if the scheme is voluntary. But he has to think of the effect on his health, of the constant strain to maintain such an output, as well as of the possibility that his higher output may in time be accepted by the employer as the normal output for all. In addition such a scheme divides the old from the young, the strong from the feeble, the quick from the slow, and the comradeship of the factory is broken up.

Increasingly important as a method of wage payment in industry is the application of Scientific Management to wages. Here by a minute and scientific application of motion study, every unnecessary movement on the part of the worker is eliminated. As far as is humanly possible, he is so adjusted

to the machine that not a touch is wasted. He works at a standard rate to secure his wage. All he does above the standard receives special payments.

Workfolk complain that they may indeed earn more, but that their monetary gain is offset by the injury to their personality in being reduced almost to an automaton, as well as by the increased monotony of their toil.

Lastly by a system of Profit Sharing and Copartnership wage earners may share—in addition to their wage—in the fortunes of the industry. Their loyalty is secured by receiving shares in the business or they may even have representatives sitting on the Board of Directors. Many have looked to such schemes of industrial copartnership, of union of capital and labour, as a solution to many of our industrial evils. On the whole however these schemes have not met with the success their founders had hoped. They are frowned upon by certain Trade Unions who fear that working-class loyalty may be impaired and are distrusted by the men who see themselves tied to a particular firm or industry by their co-operating shares. Many also declare that the additional payments (in the form of shares) are after all but deferred payments—that is payments they should have been receiving as wages but now paid to them in some other form. One of the two most recent experiments in wage payments is the entry of the State into the industrial arena and the fixing by law of minimum rates in certain industries. Thus by the Trades Boards Acts of 1909 and 1911 machinery was set up in certain "sweated industries" of an equal number of representatives from the workers and employers who, together with state nominees, fix the minimum wage for the industry. The awards of the Trades Boards are legally enforceable.

Behind the State's action there was the assumption that as the workers in these industries were powerless to help themselves, the State was bound to intervene and help them. On the other hand, it was contended that the industry was such

that it could not afford to pay higher wages, and masters dismissed those workers who they felt were not worth the minimum rates fixed by the Board. The State intrusion into industry is a development to be noted in the twentieth century.

The other experiment is the increasing application of the researches of industrial psychology to factory conditions. Chairs are made more comfortable, for this conduces to larger output with less fatigue, the rhythm of work is studied to secure greater ease in the doing of the task. Welfare work is being introduced. It is recognised that contented men do better work and increase the turnover. In so far as such improvements reduce the Subjective Costs of the worker, there is an increase in the Real Wages.

Now it is very obvious that there are large inequalities in the wages received; that is that the value of the work performed varies. This inequality of payment has little relation to the difficulty or the disagreeableness of the work. For pleasant occupations are generally well paid; bad conditions and low wages go together. The agricultural worker is generally a skilled craftsman compared with the specialised labourer in a mass production factory; the sailor in the Mercantile Marine, the fisherman, put up with danger and are masters of weather lore, but they are worse paid than unskilled factory hands. What are the causes of this inequality of payment? Adam Smith enumerated five causes to account for inequality in wages. These were

1. The agreeableness or disagreeableness of the occupation
2. The ease with which the employment can be learnt
3. The regularity of the employment
4. The trust to be imposed
5. The possibility of success.

But it has been seen that such causes bear no direct relation to the wages paid. For apparently the more agreeable the

occupation the higher the return. Why then are there such different wage rates?

1. First, there is the influence of custom and tradition. Trades which have received large wage payments continue to do so from sheer inertia to question such payments. Among salaried men, lawyers and doctors have such a tradition. Among wage-earners, compositors enjoy such a custom. Clerks have only recently had their tradition questioned by the spread of elementary education. Once the tradition of large payments has been established, it is easier for the children of the recipients to receive an expensive training in a well paid profession the cost of which limits entrants, and so high wages are maintained.

Just as there is a Trade Standard so there is a Grade Standard within the trade. The skilled expect to receive more than the unskilled, the overseer more than the ordinary worker.

2. Secondly, the condition of supply and demand of labour will affect the wage rates. The supply of labour in a particular industry is limited by the cost of training, by the time taken in training and by ability. So that an increased demand for a particular kind of labour—which will be expressed of course by an offer of higher wages—will not always be followed easily by an increase in its supply.

3. Thirdly, wage rates will vary with the relative bargaining capacity of employer and employee. For competition between the two is never free. A powerful association of employees might secure a rise in wages which otherwise might have been long delayed. A powerful employers' association may keep wages low when a rise may be due.

4. Lastly, even when different trades and different areas are offering higher wage rates, the immobility of labour is

such that those in the poorer areas and crafts are unable to take advantage of the offer. This immobility forms part of those "economic frictions" which check the free flow of labour and prevents the optimum number of people being employed in every occupation. (It has been seen that these economic frictions may be due to

- a. lack of knowledge
- b. the fact that skilled men lose their skill in new occupations.
- c. the weight of inertia.

It has also been seen that these inequalities once established tend to perpetuate themselves. Inequality of wages so tends to perpetuate itself.)

While these causes may explain inequalities of payments in different occupations and in different areas, they do not explain the general Theory of Wages as a whole. Like most Economic Theories the Theory of Wages has a history of its own.

One of the earliest of wage theories is the Subsistence Theory of Wages which has been popularised as the Iron Law of Wages. According to this Theory all wages must be on the Subsistence Level, and no effort on the part of the State or Trade Unions could raise them for long above this Subsistence level. The level was taken to be the minimum wage needed to maintain the labourer in life and to bring up a new generation. The wide prevalence of this theory accounts for the general unpopularity of Economics, which earned the name of the "Dismal Science," for it was supposed to prove to working folk the inevitability of their poverty.

For, continued the supporters of this Theory, if the labourer secured a wage above the subsistence level, then the increased income would encourage earlier marriage and an increased population. The competition of the increased additional

labourers would bring wages down again to the subsistence level. If on the other hand the labourer received less than this subsistence level, then he would starve and be unable to bring up a new family. The resulting shortage of labour would then force wages up again to subsistence level.

The soundest criticism of this theory is that it is not true to life. It is untrue that higher wages imply larger families—the experience of Western Europe is against that. If anything, a rise in the wage-rates seems to conduce to smaller families. In addition, the Real Wage of the labourer has in fact been increased in the last century, by Trade Union effort, by State activity (such as Mines Acts and Factory Acts, indeed by all the Social Legislation of the period) far above a Subsistence Level, with no such evil consequences. A larger population has not brought the wage-level down again.

Besides, the very term Subsistence Level is too vague to have scientific value. The level has varied from age to age, it varies to-day from country to country. The luxuries and comforts of former days have become the necessities of to-day. The subsistence level of a Chinese coolie is far below that of an English labourer; the level of an artisan a hundred years ago was different from that of an artisan of to-day.

The Theory does not attempt to explain the inequality of wages which in fact exists in different trades, even in different areas, and in different countries. The Theory states what was considered to be a tendency—that high wages might lead to large population and consequent increased competition for work—and the tendency has been found to be untrue to life.

Yet in spite of these criticisms the Theory has some justification. It arose in the eighteenth century. It was based a great deal on the experience of the French peasantry, who in some localities were in possession only of bare necessities. Even to-day wherever standards are exceptionally low, an increase in the total wealth may not result in an increase in the wage-rates of the labouring classes. For example, in spite of the

increase in material wealth which English civilization has brought to India and Egypt or of the increase in material wealth resulting from the Westernisation of Japan—population has increased with wealth and the individual labourer is not much better off.

John Stuart Mill stated the next historical theory of wages, The Wage Fund Theory. According to Mill, wages depended on the proportion between the population and capital. He believed that at any given moment there was a given amount of capital available which could be used for wage payments. This amount he called the Wage Fund. In order to start a business at all, every entrepreneur has to have some capital from which he can pay his working men, long before the commodity is sold. The capital available for distribution must come from previous savings or profits. Similarly at any given moment there are a number of workers who, whatever the wage, have to work in order to live. The Wage Fund is distributed between these labourers under competitive terms. It followed therefore that as long as the proportion between the population and the Wage Fund remained unchanged there could not be a change in the amount of wage payments. For if wages rose, then they would entrench on profits, which would mean either that businesses would decline (and consequently so would employment and wages) or that capital would leave the country and so reduce the demand for labour. Nor indeed could there be a rise in wages in any one industry without injuring the wage standards of other industries. For, as the Wage Fund was fixed, what one industry might gain would mean a loss to the others.

Later, with greater study, Mill began to modify the sharpness of this theory and then abandoned it. First, this theory confuses Wages with Labour Costs. For wages have been increased without entrenching on profits. If the increased wages mean a far greater increase in efficiency, then profits may even be higher than before. Secondly, if wages do rise

even at the expense of profits, the fall in profits will not immediately drive capital from any country or from any industry. Various economic frictions exist to prevent such an easy mobility of capital. For business men expect fluctuations in profit. And of course while a rise in wages may be one cause in the decline of profits it is not the only cause.

Lastly, there in fact exist variations in wage payments between different trades, and the higher rate is not at the expense of the lower. The higher rate may be due to tradition just as the lower rate may be due to such causes as the immobility of labour.

Mill recognised how untenable his theory was; he began to modify it. By population, he wrote, is meant only those who work for hire. By capital is meant the part which is expended in the purchase of labour. So that all that the Wage Fund theory ultimately says is that what the labourers receive in wages is only what the employers pay out in wages. Which is of course a truism, but it does not explain why society rewards labourers with the payments they actually receive.

The inadequacy of the Subsistence Theory and the Wages Fund Theory as an explanation of wage payments turned economists to try and discover what influence the productivity of workers exerted on their wage rates.

Now in discussing the Theory of Value, it was seen that the value of a commodity or service depended on its Marginal Utility. So the value of labour depends on its Marginal Utility to the employer. For example, in order to produce at all the employer has to buy land, labour and capital. That is, he has to pay Rent, Wages, Interest. Now at what price will he buy each of these factors of production? It is obvious that he will pay for each what he considers will be the value of each to him—according that is to their Marginal Utility to him. The employer will always try to secure the maximum production from his outlay of expenses. If he finds that by using more capital (that is more machinery, etc.) he will secure

greater productivity, he will offer more for it and the rate of interest will rise. If he considers that he can secure greater productivity by the use of more labour, he will pay more for it and the wages will rise. The employer has the choice, he can employ either more capital or more labour or more land. In so far as capital and labour can be substituted for one another, he will buy either more machines or more labour according to their productivity to him. That is, he will distribute his resources amongst the factors of production in proportion to their productivity.

He does not however buy all the land or all the labour or all the capital available. He buys just so much of each as he thinks will give him the best return in combination with the others. He buys each, in other words, according to its Marginal Productivity.

The value of labour then depends on its marginal productivity. Like the parallel Marginal Utility Theory of Value, the Marginal Productivity Theory of Wages expresses the influence exerted by Supply and Demand in deciding the value of labour. When the supply of labour is plentiful *relatively* to the supply of capital and of land, then it will be employed at work which machines would do if labour were less plentiful. Of course it will also be less productive relatively, for it will not have the help of tools and machines and so its pay will be low.

For the productivity of labour will depend on its supply *relatively* to the supply of capital and land. An increase of labour *relative* to the other agents of production will lower its productivity and send its value down—that is, wages will be low. A decrease of labour *relative* to the other agents of production will raise its productivity and its value will go up—that is wages will rise.

Similarly any changes in the organisation and in production which increase the productivity of labour will increase its value and wages will rise. A change that lowers its *relative*

productivity—relative to the other agents of production—will decrease the demand for labour and lower its value and so wages will fall.

The Marginal Productivity Theory of Wages is thus a rational explanation of wage rates. It accounts for the fact that wage rates are generally higher in new countries than in old.

In Australia, for example, land is plentiful and population relatively scarce, so that labour will be employed only where its productivity is relatively high. As capital is essential to production it will be imported. That is, Australia will borrow its capital in order to supply its people with the best machinery and tools so that Wages will be high, Rents low, and Interest will depend on the world market (although in this case the rate of interest will be lower because of the Colonial Loans Act).

In China, Japan and India with their teeming populations, labour is plentiful relatively to land and capital, so that it is employed at work which, in more progressive countries, is done by machinery. Relatively then its work is unproductive and wages are therefore low.

Important as the Marginal Productivity Theory is in exemplifying the relation of supply and demand, as applied to labour—the identity of labour is so peculiar that there are important differences to note.

First, Labour, it is seen, is rewarded according to its productivity and its productivity will depend, among other factors, on its supply and demand. But even if the supply of labour were increased a hundredfold, labour, unlike other commodities, would still have a value. If the supply of, say, salt were increased enormously its value would fall to nothing, but because labour is bound up with the labourer there must be a limit below which it cannot fall. That minimum will of course be called the Subsistence Level and it will vary according to the Standard of Life of a people. So that when

employers buy labour they recognise this limit and therefore only buy so much labour at that price which they consider will give them the largest product. If this Minimum Wage is thus fixed by a conception of a standard of life, the maximum is fixed by the productivity of labour.

Secondly, of all commodities labour is the most perishable. It cannot keep. If the work is not done—it never can be done. The same piece of work might be done later, but the time wasted in doing nothing is beyond recall. Scientifically arranged rest-pauses will indeed cause workers to work better. Such pauses are therefore not waste, but wherever work could have been performed and it is not, then that labour is lost. Of course while wants are unsatisfied there will always be a demand for work. The sellers of labour are therefore at a disadvantage as compared with buyers, as is the case with no other commodity.

Lastly, while population and labour supply are connected, they are not identical. Both the Subsistence and the Wages Fund Theories made the mistake of identifying the labour supply with the population. In any population, there will be a large proportion of people who do not work, and even among those who do work, their output will depend on their will to work and on their capacity. For human beings can and do vary their output. In addition, in a particular industry the supply of labour will be limited by all the frictional influences which have been previously discussed.

Only with these three reservations is it then true that the supply and the demand of labour are similar to the supply and the demand of any other commodity.

Before the Theory can be finally accepted there are still three further modifications to be noted. First, what is meant by the term Productivity? The theory would at first appear a justification rather than an explanation of wages. For, says the theory, the worker receives a wage according to his productivity. What then can be more just? But the productivity will

not always be his *own* productivity. It will not depend entirely on himself. His skill and hard work may suffer depreciation by bad equipment or bad organisation or bad marketing.

Secondly, productivity may have little relation to the personal effort and skill of workers. For the productivity which decides their wage rates is not their output but only their output *as measured by its market value*. Now market values will depend on all the accidents and vagaries of demand. For example, a long rainy summer will cause a demand for, say, waterproofs and umbrellas, so that the productivity of waterproof and umbrella firms and their workfolk becomes greater, although the output of the firms and the skill and the efforts of the workmen are exactly the same as they were before.

Lastly, this theory assumes that as workmen are paid according to their productivity, employers will so pay them. It assumes that if one employer does not, another will, and that competition among employers for labour will enable workmen to demand and obtain their maximum rates. If the bargaining strength as between employer and employee were equal, such indeed might be the case. But generally the employer has the stronger power, he can wait, he has a reserve on which to live, while the employee must sell his labour or starve. So that the wage rates paid need not be equivalent to the wage rates which *should* be paid, according to the productivity of labour.

A question which is becoming increasingly important in the twentieth century is—Should the wages of men and women be equal? The question ultimately resolves itself to the question—Is woman's work as productive as men's? Bearing in mind the ambiguity of the term productivity (whether it means output or market value of the output) it excludes as irrelevant any discussion as to whether men have greater domestic responsibilities than women. Wages are not paid according to domestic responsibilities but according to productivity. Nor is personal efficiency any criterion for wage pay-

ments, for it has been pointed out that personal efficiency may not mean market productivity. In addition, in some industries women are more efficient than men, in others they are quite as efficient and in others still, not as efficient. It is possible however that if the trades in which women were superior to men were as numerous as the trades in which men were superior to women, wages might be more equal.

But even under conditions as they are, frictional influences prevent the economic level being found, for the entry of women into certain trades is governed by considerations other than efficiency or ability. There is a prejudice in certain callings against employing women, even when women may be as efficient as men; Trades Unions may not allow them to join the union. Custom and tradition may prevent them entering certain trades.

This deliberate exclusion of women from certain kinds of work, even the prejudice, for example, in favour of male doctors or of male solicitors, limits the field of employment for women (for it leads to a relatively greater demand for men). They therefore crowd into those openings which are available and the supply being relatively large to the demand, their Marginal Productivity is low and therefore the price of their labour is low. This in turn reacts on those who are employed in the same callings as men. For employers, then, can pay them less than they do men, without causing them to leave those employments; for there are relatively few alternative occupations for them to enter.

CHAPTER XVI

PROFITS: THE PAYMENT FOR ENTERPRISE INTEREST: THE PAYMENT FOR THE USE OF CAPITAL

Economic Society could not to-day exist but for its accumulated capital. Wealth, it has been seen, consists of all those commodities and services which satisfy human wants. Everybody then has some wealth; even the poorest have some things which satisfy their wants; for any person who had no wealth at all, who possessed nothing with which to satisfy his wants, would die. A rich person is simply one who has many commodities and services which satisfy his wants; a poor person has few.

Capital is that portion of wealth which is used for further production. In a very simple form: if a person earns £2 a week of which he saves 5s. then he gradually saves up capital (what the accumulated 5s. will buy). He may save for all sorts of reasons—for a holiday, for old age, for a desire to be rich, to buy an expensive piece of furniture. Whatever the motive, he has some inducement or incentive to save. He hopes to enjoy in the future the satisfaction of wants that he forgoes at present. *Saving then involves the sacrifice of present wants for future wants.*

Before any person however can begin to save there must exist certain conditions. Firstly, he must earn sufficient to enable him to save. If he earned just a "subsistence wage" he could not forgo present wants to enjoy them in the future. Present wants are too insistent. Secondly, there must exist opportunities for saving. Mere hoarding is economically not saving. As English industry grew, so savings found more fruitful uses.

When the act of 1862 gave to industry the advantage of limited liability, then the savings of even the poorest could be mobilised to aid industry. To-day Banks and Insurance Companies not only give opportunity to save but they actually encourage thrift. Thirdly, not only must people be able and willing to save and have opportunities to use their savings productively, but there must also exist the requisite law and order to safeguard their savings and the recognition of property rights so that they can enjoy the fruits of their sacrifice. In a community where the law was weak and ineffective, and where the right of persons to their savings was not recognised, there would be every inducement for people to consume all their wealth as soon as they produced it, or earned it.

It is not Individuals alone who can and do save. Businesses save. If it is a private business, the owner does not spend all the profits. He keeps some back as a Reserve, either for depreciation or for use during a possible slump or for extending the business. In the case of a Joint Stock Company, all the profits are not distributed as dividends, but again some are held back as a Reserve for similar purposes.

In a certain sense the Municipality and the State can save. If the taxes of the state, or the rates of the municipality, more than cover the estimated expenses, then the surplus can be used to remit taxation or rates the following year. It could also be used, for example, to start a municipal tram service or a state railway service.

In any case people and businesses save because it is worth while forgoing the enjoyment of present satisfactions for their enjoyment in the future. Consequently, Saving and Spending are both really very much the same, except that different things are bought at different times. For example, when a person saves he puts his savings into a bank or insurance society. These institutions use the money, so deposited with them, to lend to business men and others who use the accumulated savings to extend their businesses or start new ones. For it has been seen

that man's wants are infinite and there is always an opportunity to attempt to satisfy new wants. In order to finance the production of these wants—that is in order to create new industries—the savings of people are borrowed from the banks.

Whereas spending is buying goods and services which are consumed at present (such as bread or boots or tea), that is buying Consumers' Goods, saving implies the buying of factories and machinery which will be consumed in the future, that is, buying Producers' Goods. Spending and saving are both spending.

Without saving then, industries could hardly function and new wants could scarcely be met. Our trains, our ships, our dockyards—are the result of the accumulated savings of the past. They are the world's capital. They increase the productivity of labour and of society as a whole. They make possible the standard of living we have attained. Every catastrophe which destroys capital; a war, an earthquake, accidents, leaves the world the poorer and lowers therefore the standard of life of the people.

Capital then is wealth which is set aside to be used for the production of further wealth. In our modern industrial civilisation it forms an indispensable agent in all production. Without the accumulated capital of the past, we should have to grub the ground for food.

The controversy that has arisen round the term Capital is not directed against capital as an agent of production. It is rather against the ownership of capital. Critics contend that because capital is so essential to society it should be socially controlled. For by permitting the existence of a class of private owners of capital, a class of people can exist who have no need to work, but can live by loaning out their property. To which it is replied that without such private ownership of capital there might be little inducement to save, so that sufficient capital might not be forthcoming for future production.

Capital has been divided into Fixed and Circulating capital.

Fixed capital is that form of capital which is durable, which can be used again and again, such as machinery. Circulating capital is that form of capital which fulfils its function in one use, such as seeds or stamps.

A more refined distinction is drawn between Sunk Capital which is highly specialised and which can be adopted for other use only with great difficulty, if at all—such as a pit shaft, and Floating Capital which is not so specialised and can be used for different purposes, such as wood or money or gas.

While those who work in order to live receive a wage for their labour, those who own capital can either start a business themselves or they can lend their property to those who have started, or to those who want to start, a business. Society rewards the successful business man by offering him profits.

PART ONE—PROFITS

In ordinary speech profits are the share in the flow of wealth which goes to the owners of businesses. They are generally calculated by deducting the expenses of the business from the receipts. The ordinary use of the term Profits however tends to conceal the fact that the term profits includes many other payments.

First, as most owners of businesses supply at least part of the capital, they receive a payment (that is interest) for their own capital invested.

Secondly, every business man is a risk-taker. In the profits which he receives, there is a payment for the risk he has taken. Some risk, such as fire, or default or burglary, can be passed on to insurance companies. But against the real risks of business there is no insurance. In a society which uses the economies of division of labour, risk is inevitable. For it has been seen that production is carried on ahead of demand and in anticipation of demand. How can a man foresee an unexpected rise in the cost of the raw materials or an unexpected change of fashion or the success of a new invention—all of which will

change the value and the demand of his product? How can he foretell the success or failure which may result from the installation of new machinery, or the result of attempting to open a new market or of spending a large amount on additional advertisement? As society needs a class of risk-takers, so society must pay for them. Part of profits then is payment for risk taken, or payment for the burden of responsibility.

Whilst salaries, wages, interest, and rent are contractual, and therefore fixed before the product is completed, the owner alone takes the risk of failure. In Joint Stock companies the function of risk taking can be separated from the function of management—whereas managers are paid contractual wages, the owner or shareholders take the risk of losing their money. A class of risktakers is therefore essential to keep industry as flexible as possible.

Thirdly, part of the profits may be payments which are derived from any advantage of sudden demand or from monopolistic control. These payments, it has been seen, are quasi-rents. One business may have the advantage of site, or of a secret process, or of a special patent. The owner secures additional payment as a consequence.

Lastly, profits contain payments for the work which the owner himself does. The revenue of a firm may vary with fashion, with political changes, even with changes in the weather; it will certainly vary with the ability of the owner as an organiser. His work is to organise—to take the land, labour, and capital which by themselves are productiveless and transform them into a productive machine—a business. He is paid for his work.

How vague the everyday use of the term profits is, can be seen from the fact that it embraces the profits of the smithy—which are mainly the earnings of labour and should be described as wages, the profits of the railway company which are mainly the return on capital outlay, and the profits of the farmer, which combine payments for personal work with pay-

ments for capital sunk in the land.

Economists, then, distinguish between these various elements which go to the making of profits and find in them payments for undertaking risks, payments for capital investment, payments for any monopolistic advantage, payment for management and organisation. Pure profits are the reward for enterprise. Whilst most other forms of earnings depend, it has been seen, on the terms of some contract (whether wages, interest, rent) the business man's does not.

His rewards are arrived at by subtracting his total expenses from his receipts. But these expenses will vary with the type of business. If the business is a Private Firm then the owner can work on his own capital or on borrowed capital. If he works on his own capital, the interest on his capital will form a large part of his profits. If he works on borrowed capital, then interest will be counted as an expense. If the business is a Joint Stock Company, then interest on debenture stock will be an expense, which must be deducted before profits are earned. Interest or dividends on the ordinary shares are, however, part of the profits, which are distributed to the shareholders.

Again in a Private firm, the payment for management will form a large part of the profits (for he will hardly deduct what should be his salary as his own manager). In a Joint Stock Company, payment for management or salary is an expense of the company.

It would be more difficult to disentangle the payments for risk-taking and the revenue derived from any monopolistic advantages, but such payments are nevertheless there.

The Classical Theory of Profits was that profits, like wages, and interest should be equal between industries. It was assumed that if one industry paid less than another, then business men would leave it for the industry which paid better. There was, in other words, a conception of a standard rate of profit. All business men paid the same contractual rates for

their land, labour, and their capital. The surplus they retained as profits. If profits were high in a particular industry, then business men would "flow" into it and profits would fall to the new level.

Now it may be true that over a short period there may be no connection between wage movements and profits. Over a long period however—a long run of good or bad business will ultimately react on all the contractual payments—on wages, on interest, on rent.

Why then do profits vary as between industry and industry and between different periods?

Some businesses run greater risks than others. New businesses are generally more hazardous than old ones, for it is not yet known whether the goods will take. As pioneers too, they enjoy what is in the nature of a temporary monopoly. Their profits, then, will generally be greater than in an old and settled business.

Again a business which turns over its capital several times a year, like any retail shop, will have higher profits than a business, such as a Water company, which turns over its capital once in 20 years.

In comparing profits too the average profits of a business over a long stretch of years should be taken, over periods of difficulty and of prosperity, and in addition the average profits of successful and unsuccessful firms should be taken. It has even been asserted that the average earnings in the form of profits are lower than the average earnings in the form of salaries! (if successful and unsuccessful firms are considered).

Society pays the worker a wage, and the business man or entrepreneur a profit. What would be the reasons for paying successful enterprise more highly than successful work? A simple reason might be that "enterprise" is so essential to economic life, that the "service of enterprise" is a work for which few people are gifted, so that it has a high scarcity value.

But many people may have this business ability and yet be

unable to exercise it. For in addition to having business acumen and a willingness to risk capital, the business man must have the capital to risk and comparatively few people possess that. Joint Stock companies do sometimes enable men with business capacity but without capital to exercise their ability. These, we have seen, receive a salary. Consequently to become an entrepreneur or business man, one must either have inherited capital (so that the inequality of capital ownership tends to perpetuate itself, even more than the inequality in wage receipts) or have acquired capital by saving, which is practically impossible (out of wages and even out of salaries) on such a sufficient scale as to make it possible to start any large industry. So that the ownership of capital is an additional scarcity value set on enterprise.

If the advantages of the possession of business capacity and of capital explain why there is such inequality as between profit receivers and wage receivers, it does not explain why there are even greater inequalities among profits than among wages.

What gives a business man his great advantage is the firm's goodwill. Goodwill can be defined as the sum of the firm's connections and the value of the continued custom of the clients. It may be secured and maintained by all the artifices of skilful advertising and by a staff of commercial agents and travellers, but once this goodwill has been secured, the business has a further advantage over all new-comers. Of course a person with a new commodity to offer may enter the enclosure of successful businesses, but if he wants to compete in an established industry, then he has to surmount the great obstacle—that even if he is more skilled technically, his predecessors have the start. They have the goodwill, they also have long established connection, the inner knowledge of the market, and a knowledge of the “inner ring” of dealers.

In business, then, as in many other aspects of economic society, the principle of competition is present, but what equalising influence competition may have is hindered by the

inequality of business capacity, by the inequality of wealth (which makes it impossible for many to set up in business on their own account) by the large degree of specialised knowledge needed (which limits the number qualified for business and also makes it difficult for business men to pass from one industry to another) and by the essential importance of goodwill and an established connection (which can only be acquired with difficulty and at the risk of large expense of capital).

Consequently the idea of normal or standard profits is a very vague one. The Marginal Firm—that is the firm which just manages to make a profit—survives; all those firms which have any advantage in site, in goodwill, in knowledge, make larger ones. Their extra returns can be regarded economically as Rents.

PART TWO. INTEREST.

While profits are, on ultimate analysis, the return to the entrepreneur for his services, Interest is the price paid for the use of capital. The term Interest—like Profits—needs analysis. Why are there apparently different rates of interest existing side by side? What determines the amount of interest? Why is interest paid at all?

Interest is the return on loan capital. But how can there be different rates of interest paid? The answer is, that some interest rates contain elements which are not "pure" interest. Pure interest or Net Interest is the payment for the use of capital. Actual instances of such pure interest are difficult to find, but for practical purposes, interest on "Gilt Edged" securities (that is interest on Government loans) would be typical.

Some pawn-brokers charge as much as 30% on their loans, Banks pay a low rate of interest on deposits, but charge bill-brokers even less and customers far more. In the case of Joint Stock companies, if the business is successful, ordinary shares receive a higher rate than preference shares, and preference shares than debenture shares.

The reason is that Gross or Commercial Interest contains a payment for *greater risk* of losing the money in one enterprise than in another. Because debenture shares are more risky than gilt-edged securities their return is higher.

Interest may also contain a payment for management. The pawnbroker charges a higher rate, because not only has he the risk of having the goods unclaimed, but he works in his shop and he may have the additional difficulty of having to sell the pledge.

The bill-broker gets his loan cheap because he takes the loan on very inconvenient terms of repayment, and because he relieves the bank of the difficulty of finding suitable investments for its funds. That a Latin American company offers a higher rate of interest than an English company may be simply due to the fact that greater risk is there incurred. The Pure Rate of Interest is the return on a perfectly safe investment. The Gross Rate of Interest contains payments which are profits, or wages of management, or payments for risk or quasi-rents.

Around interest, as around wages and profits, controversy has fiercely waged. Why is interest paid at all? The Greeks and the Jews saw in money a barren entity, for if money were left in a box it could not multiply. Why then should interest be paid? This idea, about the barren quality of money, was emphasised by primitive and agricultural conditions. For then, only a calamity would compel people to resort to the moneylender, who therefore appeared to take advantage of national distress to secure personal advantage. He "trafficked in other people's misfortunes." During the Middle Ages, the Church forbade the taking of usury and the State enforced its prohibition. But the laws were never in fact obeyed. Legal evasions were invented, for people were in need of money and willingly offered payment for its use. At last in 1854 the Usury Laws were repealed.

Of course, the misunderstanding occurred owing to the confusion between money and wealth. Nobody wanted the

money—the mere coin, but people did want what the money would buy. For example, in the Middle Ages, it was illegal to pay interest on a money loan, but if the money were used to buy a house which might then be let, then rent was regarded as legal, although in fact “interest” and “rent” were in this case the same payments.

Interest is the payment for the use of loan capital and as long as this capital renders a service, people will be willing to pay for its use, but even to-day various theories are put forward to explain interest from other angles.

The most extreme is the Exploitation Theory which has been popularised by Karl Marx and his school. They start with the assumption of the Labour Theory of Value, that is that Labour creates all values, and then regard Interest as “theft” which is stolen from the “surplus value,” created by labour. The owners of capital obtain this theft by exploiting labour. They increase it by further exploitation. But whether capital is privately or publicly owned, as long as a loan renders a service so long will that service be paid for.

Nassau Senior, a professor of Economics at Oxford in the early nineteenth century, suggested the Abstinence Theory of Interest. He explained that Society and industry need capital. But most people prefer to spend rather than save, that is they prefer wants to be satisfied at present, rather than in the future. In order therefore to encourage people to save, a reward was necessary. Interest was the payment to impel them to save and to stimulate saving. It was the reward for abstaining from spending on present goods.

This theory compels an analysis of the motives for saving, so that we may see what is the sacrifice or abstinence involved. First then there are the thrifty types of people who save against old age or against accidents. Now would interest be the reward for their abstinence? It is possible to imagine that if the rate of interest rose from 5% to 10% that they might make a greater sacrifice and save more, in order to take

advantage of the higher return. On the other hand, it is possible to assume that at the higher rate they might save less, for they would secure the desired income from a smaller saving. In other words, it is difficult to say what influence the rate of interest will have on those who save from motives of thrift. They may even save if no interest were offered at all.

Next to the thrifty are business men who wish to retain a reserve for emergencies or in order to extend their business. These would generally adopt a standard of living which would of course vary with their social environment and put the remainder of their profits back again into the business. There is little sacrifice or abstinence here. For they would save whatever the rate of interest.

Lastly, there are those whose incomes are so large that saving cannot be any sacrifice. After gratifying their most luxurious wants they still have a surplus. According to the law of diminishing utility their satiety—in spite of the varying channels of spending—is reached, and saving is all that is left to them. Some may use their surplus to endow a university or found a charity; still in a society in which there exists inequality of wealth, the great savers are the wealthy. Interest on such savings is hardly a reward for abstinence. It has frequently been stated that any list of shareholders in a Joint Stock Company shows a vast number to be small holders. That is used as an argument to indicate how many small investors there are. Such a conclusion however is not very logical, for one of the advantages of the Joint Stock Company is that people can divide their capital among a great many companies, so that quite wealthy people may hold comparatively few shares in a large number of companies.

The Abstinence Theory then is hardly a satisfactory explanation for the payment of interest.

Malthus and the French economist J. B. Say suggested the Productivity Theory as an explanation for the payment of

interest. They contended that just as cattle produced flocks, so capital produced interest. Against the old argument that capital was barren, they answered that if the capital were in the form of cattle, then there was obvious "productivity" when they bred.

Now is there in modern loan capital a similar capacity to produce? For example, let us take a primitive man fishing. He catches twenty fish a day. He makes a boat and is then able to catch forty a day. Whose productivity is the forty fish? the man's or the boat's? They are obviously complementary. Now if the boat were loaned out, the owner could charge for the loan and the borrower would be willing to pay the charge, for with the boat "productivity" is greater. So with all loan capital, productivity is increased.

Productivity then explains why people are willing to pay interest, simply because with the borrowed capital, productivity is increased. But does it indicate the necessity for interest? Most modern loans are of course used productively—in the sense that the loan is highly valued, so that the borrower is willing to pay for it. In the case of the business man, he uses borrowed money in two possible ways. Either he erects new buildings or instals new machinery, with which he is able to produce far more than he could have done without the extra equipment bought with the loan, or he buys goods now, which will carry him over the period between the beginning of the manufacture and the sale of the product. For by enabling him to take time over production he can use the advantages of the division of labour and so ultimately produce more.

It pays him then to offer to repay in the future the sum lent *and* interest (payment for the use of the loan).

It may be argued that not all loans are used productively; that spendthrifts and governments borrow for such purposes as gambling and wars. But even in these cases the term productively is used in the strictly economic sense—that it satisfies a want. The want of a gambler, or of the government

at war, is so intense that they are quite willing to mortgage future resources in order to satisfy their present wants.

The Productivity Theory then is true in so far as it explains the payment of interest from the point of view of demand. People demand loans because loans can be used productively. But why do people supply the loan? The function of interest is the same as the function of any price—to equalise supply and demand. For example, if the rate of interest is 5% then the effective demand for loan capital will come from people who think that at 5% it is worth while to borrow, and the effective supply from people who are satisfied with a return of 5% on their loans (or investments). So that industries which yield only 2% or 3% or 4% are sifted out and only the more urgent capital works are undertaken—the urgency being of course indicated by the willingness to pay a higher rate of interest.

The theory which attempts to explain interest from the point of view of supply is generally associated with the "Austrian theory of interest" because Prof. Böhm von Bawerk of Vienna suggested it. He treated the problem from a psychological point of view. He claimed that the chief reason for the payment of interest is that most people prefer present satisfactions to future satisfactions. People tend to discount the future and quite apart from any consideration of risk (which has its own distinct reward) people prefer £100 now to £100 in the future.

Now if a person were offered a choice between £100 now and £101 or £102 or £103 or £104 in the future he might still prefer £100 now, but if he were offered £105 in the future instead of £100 now, then a Point of Indifference would be reached. The £5 is the price paid in order to overcome the preference for present wants over future wants. The rate of interest then will depend on the disposition towards the future of those who save. This psychological theory has been summarised into a formula "Interest is the price of time." But this

"Agió-Theory," as it is sometimes called, emphasises too much the side of supply.

But even this theory has been criticised because it has already been seen that some people will save just because the future is uncertain—that is they will look beyond the needs of the present.

So a refinement of this Theory states that the reason people are unwilling to forgo or exchange £100 now for £100 in the future is that human life is itself uncertain and limited. People prefer to receive back in their own lifetime (or in that of their heirs) the satisfactions which they forgo by saving. If the rate of interest fell to say 1%, that is below the rate which would satisfy such conditions—for at 1% it would take a hundred years to return the original capital—then people might prefer to produce those goods which can be consumed immediately and fresh supplies of capital might not be forthcoming.

It can now be stated therefore that there is a demand for capital—because of the intensity of the present need of the borrower and because when converted into goods it increases productivity. The supply of loan capital is limited not only by the competition of alternative uses which always exists and by the willingness and ability to forgo present satisfactions—except on such terms that the sacrifice will be made good during the lenders' lifetime or in that of their heirs. And of course people's willingness to save is itself influenced by the amount of resources which they have, by their expectation of life, by their attitude to their heirs and by the general security and continuity of economic life.

So long as there is a sacrifice involved in saving, so long will the supply of capital always be less than the possible uses for capital, and interest will be necessary to maintain the supply.

Whilst then it would be difficult to say what would be the influence on the supply of capital *as a whole* of a change in the rate of interest, a change in the rate of interest in a

particular industry does affect the supply of capital in that industry. For capital is constantly wearing out and has to be renewed from Gross Income. If the rate of interest in a particular industry falls below the general rate, then new capital will not be secured. If the rate of interest in the industry is high, then capital will be attracted into that industry.

The productivity of capital will of course be different in different countries and at different times. The organisers of industry buy land, labour and capital (for they are used in co-operation) according to their marginal productivity. If the amount of capital available increases without any corresponding increase in the supply of labour and of natural resources, then capital will be fully employed only when it is put to uses in which it is less productive than before, and the Rate of Interest will fall. If labour and land increase relatively to capital then capital will become more productive, and the Rate of Interest will rise.

The organisers who employ land, labour and capital will use as much capital as at the current rate of interest will give the best return. So that the Rate of Interest and the Demand for Money are connected both in industry as a whole and in any particular industry. If more capital will enable production to be cheaper, then they will offer more for it and the rate of interest will rise. Conversely if the rate of interest falls then they will employ more.

Competition between lenders and borrowers tends to make the rate of interest correspond to the Marginal Productivity of capital. The estimate of the marginal investor, who is just persuaded to invest (or to save) in the Marginal investment, tends to equal the rate of interest.

If a new invention, like the railway a hundred years ago, increases the productivity of capital then the rate of interest will tend to rise. A new invention may also act in the opposite way; it may increase technical productivity and at the same

time save capital (as in the case of electricity); then the rate of interest will fall.

Also the more rapidly capital goods wear out, or become obsolete and have to be replaced, the greater will be the demand for fresh liquid capital to replace the worn-out capital and the rate of interest will rise.

And the reverse process takes place; the great increase in the expectation of life during the nineteenth century was paralleled by a decline in the rate of interest in spite of the greater productivity of new inventions.

The rate of interest also tends to fall in a stabilised country like England where political upheaval is rarely expected, for as the supply of capital is increased so does its marginal productivity decline.

In addition the attitude of a community to family ties will make a difference to the rate of interest. The more people conceive it their duty to leave a supply of capital to their heirs, the lower the rate of interest will be.

As there are so many conflicting influences at work it is very difficult to say whether the rate of interest will rise or fall in the future. In any case, like any other price, the Rate of Interest measures the sacrifice of the marginal saver and the productivity of the marginal unit of capital saved.

CHAPTER XVII

UNEMPLOYMENT

A SAD spectacle in economic society is that of the able-bodied worker seeking to sell his labour and finding no buyers. For as the labourer and his labour are inseparable, labourers have to suffer the degradation of unemployment.

The problem of unemployment cannot rise in societies where the satisfactions of wants are direct. Each man works to satisfy his own want. In simple agricultural communities where subsistence farming is the rule, man works the soil and enjoys the fruits of his labour. Of course he has to face all the antagonisms of nature as well as enjoy the bounties of nature. If plague attacks his cattle, if famine appears, he starves and dies. On the whole, however, under subsistence farming, life is secure and stable, if it is grim and hard. As capital is difficult to obtain, the demand for labour is great and unemployment hardly exists.

The English Manorial system exemplified such a closely knit unit. Even in the towns which had grown up, the division of labour was not so close as to injure a man's pride in his work and the market was known and stable. What distress existed was relieved by charity, by monasteries and by guilds.

When this subsistence life was broken up in England, and the monasteries and guilds were suppressed, then the State had to face the grim problem of unemployment. It misunderstood the problem. It treated those seeking work as vagabonds, just as to-day some treat them as unemployables. Nevertheless society has to admit that there exists an almost insoluble problem—of men genuinely seeking work and yet unable to find any.

The unemployment problem, then, emerges when markets grow, when large scale industry develops, when division of labour is adopted. It appears to be due to all those factors which make up the distinguishing features of modern economic life. We cannot go back to subsistence farming, or create subsistence industries in order to cure unemployment.

Why should modern industrial life bring unemployment in its train? The problem is indeed so acute that a great variety of reasons have been given. Some fallacies have received so large a following that they merit examination.

Some recognise the urgency of the problem and set themselves the task of creating work in order to absorb the out-of-work labour. To them it appears that wars, or catastrophes or accidents or fires, creating as they do a demand for labour, are to the advantage of labour. The best criticism against these suppositions is that offered by Bastiat, a French economist, in his well-known story of the Broken Pane. A scapegrace son of honest Jacques Bonhomme breaks a pane of glass. His father is indignant but neighbours try to calm his wrath with the remark that such accidents are good for trade for "What would become of glaziers if no windows were broken?" Then Jacques gives them an economic lecture. Logically he declares it would be best for trade, to go round and break all the windows, for then glaziers would be fully employed. In this case the person who had his window broken spent, let us say, 5 francs in having a new pane put in. He therefore possesses 5 francs less than he did. He is worse off for the accident. Moreover he could have used the 5 francs for some other purpose; let us say, he could have bought a new hat. The accident, then, has caused unemployment among hatters, so that while the glazier's trade may have improved, all trade has not improved. The destruction of wealth cannot make for general employment. For by this accident capital has been used to repair rather than to create, and both society and the person who had the window broken, are the poorer.

Accidents and fires cannot solve unemployment. Every post-war period has had its unemployment problem, for the destruction of wealth leaves the world the poorer. If people are employed to make good the destruction, they are taken from satisfying the new wants, which continue to arise.

It has also been argued that lavish expenditure creates work. For by creating a demand for goods labour is employed to produce them and so work is created. But waste cannot create employment. Waste can be defined as spending without receiving an equal amount of satisfaction; and as the power to spend comes as a result of effort, waste is simply effort which does not yield a corresponding satisfaction. Now expenditure on luxuries may be economically worth while to the spender, if it yields to him satisfaction proportionate to his expenditure. But from the point of view of Society this expenditure must be considered in relation to the amount of capital and labour used—which might have been used to satisfy more urgent needs. For example, at the end of the Napoleonic Wars the Prince Regent (in order to encourage employment) gave most magnificent banquets involving the consumption of costly food and drink, the use of expensive flowers, the display of extravagant dresses, all to “encourage employment.” From his point of view all this may not have constituted waste, for he may have considered that he received an adequate return. But from the Social point of view, the effort may have involved a disproportionate expenditure of labour and capital to the satisfaction of wants which, by the law of diminishing utility, could not have given the same satisfaction as its spending on more urgent needs. There is as much waste in any individual satisfaction which is not proportionate to the *social* expenditure of effort, as there is in individual effort which does not give a proportionate satisfaction.

When food is thrown away, when things are allowed to spoil, these do not create work. Everything that is wasted is so much taken from the National Dividend, which is the total

amount of goods and services available for consumption. The more there is wasted, the less there is for the community to consume and the poorer is the community. If the Prince Regent had not spent extravagantly, the money would not have been lost. The money so saved would have been borrowed from the banks and used for productive purposes.

Because work-people believe that the amount of work is fixed, that is that there exists a Work Fund, they work slowly, because they fear that when the work is finished they will be left unemployed. It is possible that the amount of work to be done, in any stated period, may be limited. But it has been seen that over a long period "work creates work." For our wants create the work, and our wants are never satisfied. Whilst our wants are effective, effort will be made to satisfy them.

By far the most deeply rooted prejudice is the belief that machinery creates unemployment. It is obvious that if all machinery were abolished there would be no unemployment—for those who survived; and the misery and the poverty of the survivors would hardly be a compensation for the present evil of unemployment. But does machinery create unemployment? When the machine is applied to production there is generally a greater product. The larger the output, unless the demand for the commodity is rigid, brings about a reduction in price. Consequently consumers will now have a surplus with which they are able to buy other commodities and services—which constitutes a demand for more labour. Or at the cheaper price they may buy more of the same commodity so that labour may not be displaced at all. Also, many who at the former price could not have afforded it, can do so now, so that the increased demand will again mean that no labour need be displaced. The owner introduced the machine because of its greater productivity. He therefore finds his profits increasing. His increased profits are either saved or spent, and

in either case that will constitute a demand for labour. In addition men are now wanted to make the machine. Ultimately therefore machinery increases the volume of employment.

Over a short period the introduction of machinery *will* displace labour. It has been seen that the employer will use capital and labour according to their marginal utility. To him they are in the nature of an alternative demand; he can use either more men, or a machine. When he decides to employ the machine it will be at the expense of men. As these men cannot easily be absorbed in the industry making the machine, or in the industries which have been stimulated through the increased demands by consumers, their suffering and their sense of helplessness is the price paid by society for industrial "progress." Their suffering might be softened if it were considered a communal responsibility.

Among the many causes for general unemployment is war. War may for a time stimulate certain industries and give a surface-appearance of prosperity, but every post-war period has been a period of distress, and the causes are bound up with the very goal of war. First, war dislocates the balance of production. The whole of the nation's resources are concentrated on victory, consequently new war industries are created and old industries are diverted to war purposes. Labour and capital are deflected to war industries. When peace is signed, industry is re-applied to economic purposes. All the industries which have been stimulated or which have been created in the war effort (munitions, shipbuilding, agriculture, glass, chemicals, clothing), find that their markets have disappeared. Men are dismissed. Not alone are resources diverted to war channels, but wealth is consumed at a rapid rate, capital is destroyed as rapidly, so the world emerges the poorer. This means then a smaller demand for goods and a smaller volume of employment. In addition, heavy taxation has to be imposed to meet the war expenses and the interest on the war debt.

This adds an additional burden on all industry and reacts on the demand for labour.

Because of the loss of life and limb during war, the productive capacity of the nation is impaired and this is further aggravated by the depreciation of industrial plant during the dislocation of the war period.

In those cases where the belligerents were each other's customers, accustomed markets are lost and recovery is even more difficult. The indirect commercial results may even be graver than the direct results of war. If areas have been devastated, they can be reclaimed; if factories and plant have been destroyed, they can be rebuilt. But how re-create the delicate network of trade relations, at home and abroad, which has been dislocated? The trade arteries have been cut. Goodwill has been destroyed. Markets have been invaded. A long period has to elapse before industrial equilibrium can be restored.

Lastly these difficulties may be aggravated by the terms of peace. At the end of the Franco-Prussian war, Germany imposed on France the payment of large reparations (called then a war indemnity). At the end of the Great War, the Allies imposed on Germany similar war indemnities. The effort required in order to pay them dislocated still further the economic equilibrium of the world. For if the defeated nation pays indemnities in goods, then the industries in the victorious countries suffer. If they are paid in gold, then the defeated nation is compelled to reorganise its industries ("rationalise," it is called) and invade competitors' markets, while the gold payment raises prices among the victorious peoples.

At the end of the Great War, England found not only her industry dislocated, her trade connections cut, her productive system diverted, but also frantic competition from her former industrial rivals. Economically war is not a paying "industry." The dislocation of war inevitably brings unemployment in its trail—to the victorious as well as to the defeated peoples.

But of course unemployment existed before the war. It is not entirely a war problem. What then are the causes? These may be particular and affect certain industries or they may be general and affect all industries.

The demand for some kind of labour is, from the nature of industry, irregular and of short duration. This kind of labour is sometimes known as Casual labour. The amount of work at the docks fluctuates from day to day—with the tide and the number of ships coming in. The amount of snow-sweepers in winter will depend on how often snow falls. In such cases labour is bought, not regularly, but often by the hour. The problem of this casual labour or "under-employment" is not only the most difficult of social problems but its influence on the worker is vicious, for he has to lead an uncertain and capricious economic life with consequent deterioration in industrial efficiency.

Some trades also are by their nature seasonal rather than continuous and there is consequently a seasonal demand for labour in such occupations. Summer creates a demand for maids at seaside resorts, for painters and builders, even for agricultural labourers. Winter creates a demand for coal-workers. In the off or slack periods men are dismissed and unemployment increases. It might be possible to mitigate some of the distress if men combined two trades, as, for example, that of a builder's labourer in the summer and that of a labourer in, say, an electricity works in the winter. But such transference is not always possible or easy; so that seasonal changes of trade cause an appreciable volume of unemployment.

Unemployment will also be caused by any changes in demand which may be due to the vagaries in fashion or to changes in public taste and opinion. If England turned "tee-total," then those engaged in the beer industry would be unemployed until they were absorbed in those industries which would be stimulated by new demands. If people prefer

artificial silk to cotton, then Lancashire operatives will suffer. Nottingham lace workers become unemployed when lace goes out of fashion. As oil or water power replaces coal, so coal-workers will be dismissed.

This cause of unemployment in a sense overlaps the wider cause of unemployment which is the result of technical changes within the industry as a whole. New inventions are constantly either changing the technique of old industries or creating new industries. For example, in smelting, wood was replaced by coal just as coal is being replaced by hydro-electric power. The train competed successfully with the stage-coach (with resulting unemployment among coach-builders, harness-makers, horse-breeders, even among tavern-keepers) and now, in its turn, the train is finding the motor-coach a very serious rival. The clerk at the office is finding the automatic adding machine a grave competitor, the "talkie" has replaced the silent film. Society pays for this industrial progress; the burden however is borne by those least able to bear it, by the working folk of those industries which have been displaced.

Some may be too old to take advantage of openings in the newly created industries; the inertia is too great for them to overcome. The rising generation may be unable to take advantage of the new crafts, for the strong localisation of certain industries acts as a check on movement. So that a whole district or an entire town may become derelict because of the pace of industrial change. So, in the eighteenth century, whole villages suffered from the changes in agricultural technique, consequent on the enclosure movement; so endured the long-drawn-out agony of the hand loom weavers in the early part of the nineteenth century in their hopeless struggle against the machine; so in modern times in England have certain coal-mining areas become the homes of despair.

Lastly, unemployment in a particular industry may be due

to changes affecting the supply of a commodity. Drought in Australia, a cotton pest in Carolina, disease in the wine areas of France, a war which cuts off a regular source of supply from the market, will dislocate industry and unemployment will follow. And because industry is so interlocked, not only will the actual industry concerned suffer but all those industries making "producers'" goods will be affected—packers, transport agencies, bankers.

These causes, so far, account for unemployment in a particular industry. But economic society to-day witnesses a far vaster problem—not a particular industry but the whole of industry attacked by unemployment, which at periods rises to such dimensions as to threaten the whole industrial fabric. Some contend that with industry as at present organised, unemployment is inevitable, that the unemployed form a kind of "labour reserve" to do the casual work in slump periods, and to be drafted into the army of the unskilled during times of boom.

What are the causes of this general unemployment?

The most striking characteristic of modern industry is its close specialisation—not only of individuals, but of machines, of firms, of industries, even of areas. Specialisation has led to greater production but it is also attended with greater risks. Markets are now world wide. A farthing a pound on any commodity will divert a ship to another continent. Production consequently is a very roundabout and lengthy process. How long does it take to produce a pair of boots from leather made in the Argentine, brought in ships built on Tyneside, with machinery made in Pittsburg? Similarly it takes years to produce a suit of clothes, or a cotton shirt or a felt hat.

All production is then carried on in anticipation of demand and, unless producers want to court failure, on some estimate of what that demand will be. The consumer is thus able to walk into a shop and find there what he wants. But with the most careful estimating mistakes occur. The marvel is that so

few mistakes occur, seeing that production is so roundabout. If things are produced which are not wanted,—either because of a change in fashion, or because a substitute has been found,—or if they are not wanted to the extent the producers estimated, or even if people want more of the article than the producers estimated, then unemployment will follow.

If more of the article has been produced than is wanted, then business men cannot sell them except at a reduced price. The lower price will then react backwards, to every source of supply. Employers will lessen their production and dismiss men. They will order less raw material, and the growers will dismiss men. Less transport will be needed, and transport agencies will dismiss men.

If insufficient goods are produced, consumers will compete and force prices up—the higher price will stimulate production and this may easily be followed by “over production,” in the attempt to satisfy the estimated demand. The great advantage of trusts and combines and schemes of rationalisation is that they may embody a scientific attempt to apportion production to demand. Whilst there is freedom to compete for the custom of the public, so long will each competitor try to secure the largest output in his efforts to secure high profits. As there exists no co-ordination, no central authority controlling production, the danger of miscalculating the demand for the product is ever present.

The miscalculation may be due to all sorts of reasons—to the growth of substitutes, to changes of fashion, to spells of good or bad weather. The results may be comparatively trivial, as when a new hat which does not take is put on the market, or very serious, as when a tram service is completed in a decaying town, involving the uneconomical application of capital and labour. Wherever there has been an incorrect anticipation of demand or an incorrect estimate of demand there unemployment will occur. As industries are intertwined the unemployment will spread to other industries.

In a similar way imperfect cooperation among producers will result in unemployment, or intensify unemployment. The great advantage of specialisation is that it involves cooperation. Specialised workers in a single firm cooperate, but so does the specialised wool grower cooperate with the specialised wool spinner, and the coal miner with the iron smelter. In a single firm, if the manager is inefficient, one department may be working over-time while another may be standing idle waiting for work. There is then defective cooperation among departments. There may similarly exist defective cooperation among firms and industries; for firms and industries are customers of one another. Their cooperation may even be more imperfect because there is no general manager to secure their coordination. If cotton growers expand their cotton fields faster than the cotton looms can deal with the product, or if the cotton looms expand more rapidly than the cotton growers, men will become idle and unemployment figures will mount.

The problem is further complicated by the fact that industries cannot be expanded or contracted at the same rate—different industries take differing lengths of time—and again unemployment will follow.

In both cases—when unemployment results from an imperfect anticipation of demand or from an imperfect cooperation among producers—the difficulties are aggravated by the lack of mobility of working men, by the fact that land and workers and plant are too specialised, by all those hindrances which prevent a rapid adjustment of the factors of production to the new demands.

Other explanations of unemployment have also been offered. It has been noted that alternations of slump and boom occur with a certain regularity and that this trade cycle has a rhythm which it is thought cannot be entirely due to chance. Jevons who investigated this problem, established that between 1763-1878 there were twelve such industrial and commercial

crises at fairly regular intervals of ten to fourteen years. He thought that such crises were due to fluctuations in trade between England and the tropical and the sub-tropical countries which in turn were caused by variations in the amount of heat given out by the sun, of which he supposed that the sun-spot fluctuation in the sun was the indication. He therefore came to the conclusion that a "decennial meteorological period" existed which accounted for the regular alternations of boom and slump in industry. During the boom it is especially the constructional industries which expand—iron, steel, shipbuilding; money circulates freely (the Clearing House indicates that), prices rise but so do profits, companies are promoted, employment is active and overtime is the rule.

Then the boom passes into the slump. Prices fall rapidly, the circulation of money slows down, the rate of interest falls, profits decline, wages drop, unemployment mounts. Now it is possible that weather and climatic conditions—that sun spots—may have something to do with this slump. But, assert the critics, the weakness of the theory, however, is that the best harvests do not occur with boom years; the contrary almost appears to be true, for large harvests mean that markets are overstocked, which causes a fall in prices, a slump in trade, and extensive unemployment.

Because in most cases the slump and boom begin in the constructional industries some have sought a clue to the problem here. They argue that the demand for consumers' goods is generally direct and the market fairly well known, while the demand for producers' goods is indirect and far more open to risk. Thus the demand for clothes may be fairly stable, but the demand for machinery to make the clothes is open to far greater fluctuation. In addition, these producers' goods take a longer time to make, and it is longer still before they are used, so that all those taking part in such production—inventors, engineers, iron and steel workers—have to think ahead for years. As most firms producing similar goods are doing the

same, there is far greater risk of overproduction with its inevitable trail of unemployment.

Now there may be some truth in this theory. Periods of invention and expansion of industry have coincided with boom periods, but if this were the only cause then it might be expected that because different industries take different periods in which to complete their product, and as inventions and improvements do not all come together, a slump in one industry would be cancelled out by a boom in another, whereas slump and boom, when they come, affect all industries.

J. A. Hobson has used these facts—that producers' goods take longer to produce and are more risky in production—on which to base his theory of "underconsumption" as being the root cause of unemployment. He and his school note certain data. In economic society there are great inequalities of wealth. The poor must spend on consumers' goods, the wealthy cannot help saving and investing—that is buying producers' goods. Ultimately, because of this "oversaving," the amount of producers' goods is so large that it is out of proportion to the amount of consumers' goods that can be sold. So that continued saving results in goods being produced which the poor cannot afford to buy. As these goods remain unsold, panic overtakes the investing public. They cease to invest; there is no further demand for constructional goods and the slump follows.

Now it is true that panic at times overtakes the business community. Mr. Hobson's cure for unemployment is "more spending and less saving." But, assert the critics, people who save do not invest their money thoughtlessly. Optimism it is true may overreach itself in investment, but on the whole most investments are cautiously made, with careful regard to the purchasing capacity of the final consumer. Less saving would mean fewer capital goods in the future and an economic world inclined to become static in industry and commerce.

Still another cause for this rhythmical ebb and flow of

industry is put down to the action of banks and their monetary policy. Our monetary system is based on gold. But as industry expands it is financed by bank credits. When these bankers' loans are found to be too large for the gold reserve, then banks restrict credits—that is they call in loans and refuse to lend any more except at a higher rate. Even then some businesses may continue to borrow, until one firm just overdoes it and crashes. This starts a panic, because industrial life is based upon a very delicate factor, confidence. Other firms then begin to curtail production and dismiss their men and the symptoms of the industrial slump become visible everywhere.

Many others, while agreeing that there may be an element of truth in this theory that unemployment may be caused by the action of banks, base this rhythm of industry upon a psychological foundation. They explain that business is conducted on confidence, and that if anything occurs to cast but a shadow of doubt on this confidence, then a crisis begins, and the slump follows. The slump will last until the stocks held by the consumer are exhausted, until the firms which remain in the industry after bankruptcy has weeded out the weaker firms can just continue to survive. Then the demand for the smaller supply of goods will cause a rise in prices. People are compelled to draw on their savings and investments, which in turn checks production and accelerates the rise in prices. So the boom begins, until confidence is again undermined and the rhythm continues.

Society has as yet found no cure for unemployment. It is the price paid by society for industrial and commercial advance. It may be alleviated by sympathetic understanding. It can be reduced by common and concerted action. It is the greatest social disease of industrial society.

CHAPTER XVIII

TAXATION

So far Man's activities as a producer and a consumer have been considered. But Man lives with other men. He lives in a community and the community is organised politically as a State. What the precise functions of the State are is open to acute controversy. It is a problem of Politics rather than of Economics. Only in so far as there is an economic aspect to the activities of the State, is it the concern of the economist.

The difficulty that arises in discussing the economic activities of the State is complicated by the fact that when the economic activities of a particular state are analysed, the facts of what actually *are* the economic functions of that state become merged in the larger problem of what *should* be the economic activities of the state.

Still a further difficulty arises. The idea of the state itself—its functions and its duties—varies from age to age. The English state of the Middle Ages differs from the English state of the twentieth century. But so does the idea of the English state differ from that of the American or Japanese or Russian state. Each civilization, each people, each age erects its own state, and fear of state activity or the demand for state activity will depend largely on historical circumstances.

In eighteenth century England there grew up a distrust of the state. Its machinery appeared cumbrous, its officials corrupt, its laws antiquated, its industrial rulings hampering. Consequently in the industrial and the commercial sphere the individual claimed freedom to behave as he thought best. It was argued that each person, by seeking for himself the greatest quantity of goods and services, became not only as

useful as possible to the rest of the community, but that if every person behaved in a similar way, the community as a whole would benefit, and secure the greatest possible welfare.

It was therefore urged that the function of the state was purely a negative one—to refrain from interfering, to keep out of the way, and let individual self-interest work itself out. This system was called *laissez faire*. Under the influence of such ideas, many laws which the state had previously passed regulating craft life, the wages of labourers, the import of commodities, were repealed. Freedom of enterprise, personal initiative, self help, were thought to be fostered.

But the fact that man lives in a community compels the community to act through the state. For example, even in the eighteenth century, in spite of the ideas of *laissez faire*, landowners by the Corn laws invoked the help of the state to protect them from the import of foreign corn, and industrialists sought the help of the state to prevent their labourers from combining in Trade Unions. To-day the very bases of economic life—private property and economic freedom—depend on the state's sanction.

Without entering into a discussion as to what *should* be the economic activities of the state, this chapter can be limited to what *are* the economic functions of the English state in the twentieth century. In the first place then, it secures the necessary law and order within the realm which is the essential pre-requisite of all economic activity. The economic importance of the state control of the police could only be visualised if each person had to undertake his own protection and guard his property against attack. Again, individual enterprise would fail in the "business of defence" against external attack, so that the defence forces, the army, the navy, the air force, are state services. A community could of course hand over its defence to a private person or company, and pay—as in all economic activity—according to success or failure. The result would not be, however, very encouraging. The state, too,

has monopolised the service of justice. It has monopolised the issue of legal money within the realm. It controls the roads in its territory. Its laws sanction private property and make possible economic freedom (which permits production to be so flexible). These activities are mainly of the kind in which individual effort would fail and the state thus creates the legal environment in which economic life can shelter.

The State also interferes in and regulates the economic life of its people. For example, in the realm of production, it has forbidden the employment of children below a certain age, and of women and children in certain industries. It has regulated the hours of work and has insisted on certain minimum standards of health conditions in factories and workshops. It has ordered machinery to be fenced and has specially regulated work in dangerous trades. In most of these cases, the industry has not suffered by such interference—indeed production has been increased, although whether production would have increased had there been no such regulation would be difficult to say. In all such cases the State has affected production by reducing the Subjective Costs of industry and consequently it has increased the welfare of the individual (even if production had not been stimulated).

The State has a duty to the community which the individual can ignore. It can take a longer view than any individual employer or worker. Where private enterprise is inadequate, where it would not pay any private individual to run an enterprise or a service—such as the education and health services—there the state can function. By securing the health and education of the present generation, the future generation can be economically more productive.

By its legislation, the state affects the number and quality of the population, and therefore ultimately the labour supply and the productivity of the nation. By aliens' laws it checks the free flow of labour to these isles; by a bounty on imperial settlement it encourages emigration to such lands as Canada

and Australia. It affects the quality of the population by free and compulsory education for all children, and by its scholarship system, secondary and university education are made available for those able to pass certain tests. Owing to the urgency of present needs, parents may be either unwilling or unable to educate their own children. The state steps in where private effort fails. Similarly it influences future production by supplying clinics for mothers and children, and meals and medical services at school. It influences both present and future production by a system of state insurance against sickness and unemployment. It has attempted to aid the flow of labour to the industries needing labour by a system of labour exchanges. In certain (sweated) industries it has set up machinery to establish a minimum wage; it has given subsidies to other industries (coal) to enable the industry to pay a "living wage."

It has also given subsidies to enable houses to be sold or let at prices which are not the result of free competition. It also interferes—and helps—in production, by its patent laws and copyright regulations in order to give the inventor or author a legal right to the rewards accruing from his inventions or his knowledge. Its laws enable the savings of its citizens to be mobilised by Joint Stock companies. In certain cases of monopoly—where monopoly is essential to efficiency—it regulates industry, although in its attitude to monopoly as a whole it is still undecided. The state too, forbids the manufacture of harmful drugs and regulates even their medicinal use.

Just as the state interferes in production, to facilitate it by its laws; to supplement it, when private effort would prove inadequate; to control it in the interest of the future; so it influences distribution. Some economists have even suggested a new source of income resulting from the state influence on distribution—Income from Civic Rights. According to "economic law," only those should receive goods and services

who have contributed to their production. But the state gives free education to children and pensions to the aged. It distributes grants to those who do not work (it is assumed that they are willing to work, but are unable to find any). By subsidising houses it adds to the "goods" of those who live in them. The state and municipality provide museums and art galleries, parks and open spaces, which add to the welfare of all.

Just as it affects the free flow of labour by immigration laws, so it affects the free flow of goods by tariffs. Some have even suggested that the state should enter industry itself and become an employer of labour, as it already does in the case of the post office, and as some foreign states do in the case of railways, and even in shipping. The true functions of the state are indeed a matter for controversy.

Although the state is therefore extremely active in regulating industry and commerce, its contact with the community as a whole is through the medium of taxation.

The state like the individual has wants. The wants will of course depend on the functions of the state and its obligations. It has need of an income because it has to meet expenditure. The income of the state is provided by its members. A comparison has frequently been drawn between the wants of the state and the wants of the individual. It has been contended that the state, like the individual, has a certain standard of living (the Standard of Living can be taken to mean that the satisfaction of certain wants has gone on long enough to become a habit) so that poor states have to forgo what rich states can afford, and that just as individual wants can be defined as necessities, comforts, and luxuries, so the wants of the state can be similarly classified.

¶ It would be interesting to attempt such a classification. The state needs defence against attack and internal order—these might be necessities. Is education—the state wants to educate its children—a luxury or a comfort? Are the health acts and the factory acts luxuries? (the state wants to maintain th-

health of its people and reduce the subjective costs of factory industry). Obviously it is just as difficult to classify the wants of the state as those of the individual. The luxuries of to-day become the comforts of to-morrow and the necessities of the day after. In other words, the wants of the state increase as its functions increase and as its functions increase so does its expenditure.

The analogy between the state and the individual is not quite parallel. The state like an individual can be regarded as an employer of labour. As the wants and the functions of the state increase, it must have an increasing body of employees—Civil Servants—to satisfy the nation's wants. Now an ordinary person, acting on his own behalf, would employ men only if they produced a profit to himself. The state engages these men not with a view to profit making, for it is acting on behalf of the whole community. It believes that the nation secures the best return from the increased welfare resulting from their activities.

Again when any person offers a sum of money for any commodity or service he expects to receive it in exchange. The amount offered is accepted as the value of the commodity or service. But in the case of the state, while the community as a whole pays the amount required and the community as a whole receives the services it has bought, the individuals who contribute to the payment do not receive any benefit in proportion to their payments. It might be true to say that on the whole the less a person contributes the more does he receive. The poor for example receive the same benefits from the "defence services" as the rich, although their contribution is far less and they receive on the whole a larger benefit from the social services. The wealthy do not send their children to state schools, nor are their children eligible for free places.

The third difference is that whereas the individual has to earn his income first and then spend it to satisfy his wants—his satisfactions depend on his income—the state does the

reverse. It decides its wants first, and then collects its income to satisfy those wants.

The expenditure of the government is sometimes divided into Productive and Unproductive expenditure. In the strictly economic sense, all the expenditure is productive since it satisfies wants. The term therefore has a specialised use here. By "productive" expenditure is meant the expenditure from which the government obtains a further revenue. For example, State expenditure on the Postal service, and Municipal expenditure on a Gas or Tramway service, would be regarded as productive—even though they would not be run at a profit. As long as there is a Revenue which can be offset against expenditure, the service is considered as "Productive." On the other hand, the Health services and the Education services, even although they satisfy the wants of the nation and increase the health and the intellect, and therefore the productive powers of the people, are classed as Unproductive, simply because no money return is possible. Their return cannot be measured.

The income of the state is obtained mainly by taxation (by rates, in the case of local authorities) but not entirely. It also obtains some income from property it possesses, and from the productive enterprises in which it engages.

The revenue from the private property of the state includes the income from Crown Lands, and the dividends from the shares in the Suez Canal. These, with the revenues from productive enterprises, are sometimes known as the Quasi-Private Revenue of the state, for it closely resembles the income of a private individual. Thus the Post Office gives a large annual return. Similarly the profits from the work of the mint go to the state. In countries which own their own railways, the state secures a large revenue from this form of property, as do the states which hold the tobacco monopoly.

But by far the largest revenue comes from taxation. The various kinds of taxation can be classified as Direct and In-

direct. Direct taxation is generally taxation on income and indirect taxation on goods. The state income is thus a deduction from the income of its individual members. On the whole those who pay Direct Taxes cannot pass on the payment; those who pay Indirect Taxes can and do pass on the payment to the final consumer.

The best examples of Direct Taxes are the Income Tax, the Death Duties, the Land Tax, the Stamp Tax and the various licences which have to be taken out for motors, dogs, guns, carriages, and men servants. Indirect Taxes consist mainly of Excise Duties, that is taxes levied on the production or consumption of goods within the realm, and Customs Duties which are levied on goods brought into the country. As these goods are taxed, the producer (for example, the brewer who pays the Excise Duty on beer) or the Importer (for example, a merchant who pays the Customs Duty on tea or tobacco) passes on the tax to the consumer, by raising the price of the goods. (When taxes are levied according to the value of the goods they are called *Ad Valorem Duties*, British customs duties are generally not fixed according to values but according to quantities. These are called *Specific Duties*.)

Where the burden of the tax actually falls is called its Incidence. In the case of Direct Taxation, the incidence of the tax falls on the actual payer; in the case of Indirect Taxation the incidence of the tax falls on the final consumer.

Every Chancellor who imposes taxes has to think of the ultimate effect of a tax, as well as whether the tax will bring in the required revenue. For example, in the case of indirect taxation, if a tax is imposed on tea the higher price of tea might lead to less tea being drunk and the effects might flow right back to the tea planters, to the tea merchants, to the tea carriers, who would all suffer from the results of the tax. Even if the demand for tea were inelastic, so that at the higher price still the same amount of tea was drunk, even then the effects of the tax might be harmful; for a greater part of the

consumer's income would be spent on tea, which would mean that less was being spent on other commodities and services, and this would cause loss and unemployment to those producing the other commodities and services.

Similarly, in the case of Direct Taxation, as the tax is increased so less is spent or saved by the payer, and in either event, the effects are widespread. Or the tax may be so large that it may make the business man think that if his income is to be so heavily taxed, it was not worth while producing. On the other hand the higher tax might prove an incentive to further effort on his part, in order to pay the heavy tax and still maintain his accustomed standard of living. In technical language it will depend on his "elasticity of demand for income in terms of effort."

The same argument would hold good in the case of Death Duties. The effort to save may be relaxed, or, on the other hand, they may prove a further incentive. Business men on the whole now meet the demands of the exchequer with a grace which would have been considered impossible in the nineteenth century. Whenever a tax limits production, the tax is of course harmful to the industry concerned as well as to the whole nation, for it will ultimately bring in a reduced income.

The state, having wants, decides to satisfy these wants by obtaining a revenue from taxation. But the state may use the machinery of taxation for other purposes besides that of merely obtaining a revenue. It may use it on Moral grounds. Having decided for example that the consumption of alcoholic liquor is harmful, it may decide to check its use by taxing it and so raising its price. It may so decide in the case of tobacco or any other drug.

Similarly it may use the machinery of taxation for Social purposes, in order to adjust the existing inequalities of wealth by taxing large incomes far more heavily than smaller incomes.

Or again it may use the same machinery for Political purposes, imposing for example a tax on imported goods in order to encourage home manufacture. For the state does not act from an economic motive only. Its interests embrace all the activities of the community.

The source of the State Revenue or the National Income is the nation itself, and the State has next to consider how to distribute the taxation among the individual members of the nation.

In dealing with this problem in the eighteenth century, Adam Smith laid down four canons of taxation which are still applicable to-day. He suggested that taxation should be based on Equality, Certainty, Convenience, and Economy.

By Equality he meant that the state should impose its taxation with regard to justice and so make every person contribute according to his ability to pay. Adam Smith considered that ability was in proportion to one's income. But here he was wrong. According to the Law of Diminishing Utility, £5 out of an income of £100 is worth more to the owner than £50 out of an income of £1000, although both amounts are in the same proportion. To be just, therefore, taxation should be not only proportional but Progressive—that is, increasing in rate as the income increases.

Progressive taxation can be easily adjusted in the case of direct taxation. It is almost impossible to introduce this progressive principle in the case of indirect taxation. In order to avoid a large number of small taxes, indirect taxes are generally imposed on a few staple commodities which people constantly use—tea, sugar, tobacco, beer. Consequently as the poor spend a far larger proportion of their income than the rich on staple commodities, taxation of such goods is generally Regressive; that is a heavier burden is imposed on the poor than on the rich. Most states therefore rely, in justice, more on direct taxation than on indirect taxation to obtain their income.

The second canon of taxation—Certainty—deals rather with the method of collecting, than with a principle of distribution. It is a good administrative rule that the tax which the individual has to pay "should be certain rather than arbitrary, that the time of payment, the manner of payment and the quantity to be paid ought to be clear and plain." It is equally obvious that all stand to gain if the payment is called for and made at as convenient a time as possible.

It would, in addition, be very foolish for the state to impose a tax which would cost so much to collect that the revenue might be less than the cost of collection. Excise and Customs duties need a large army of officials; they encourage smuggling; they may interfere with trade. On the whole therefore, Direct Taxation appears to be not only more just, but it satisfies most canons of taxation. Indeed the proportion of Direct to Indirect taxation has changed from being 33% of direct to 67% indirect in 1850 to being 67% direct and 33% indirect in 1925.

Professor Bastable has supplemented the four canons of Adam Smith with two others—that taxes should be Productive and that they should be Elastic.

It would hardly be worth while imposing a new tax which brought in only a small revenue, for the friction which the tax would excite, its political consequences, might outweigh its economic advantages. In addition a tax, to be Productive, must not injure or weaken the source from which the tax is derived. For a tax may so diminish the business done or the business profits, that the yield of the tax itself will ultimately decline.

Taxes too should be Elastic, in the sense that if they are increased, there will not result a falling off in the revenue derived from them. This canon should apply equally to indirect as to direct taxation. If for example an increase in the Income Tax or in the Tea Duty led to the results that business incomes were badly impaired or that less tea was drunk, then

not only would the nation as a whole suffer but the revenue itself would suffer.

The main arguments for Direct Taxation can now be summarised.

1. It has the advantage of low cost of collection.
2. Any increase in wealth actually yields an increase in revenue.
3. Direct taxation is generally elastic.
4. The tax payer knows what he has to pay and when he has to pay.
5. It can be adjusted to become Progressive.
6. Citizenship is helped by a knowledge of what one pays.

Those who still prefer Indirect Taxation argue that

1. Direct taxation leads to evasion and fraud. For example, the fact of declaring one's income brings in a connection between extent of taxation and extent of honesty.
2. People prefer indirect taxation because they do not feel the burden, the tax being hidden in the price of the goods.
3. By taxation of luxuries, only the wealthy need pay.
4. The state can use taxation for other than revenue purposes.

Taxation then is an essential interference by the state in the private concerns of the citizen. In actual fact large portions of our taxes go to paying off the debts incurred in past wars and in maintaining our defences to prevent—some say to prepare for—future wars. In addition, the objects of taxation are to supply those goods and services which private enterprise might fail to do adequately, to supplement private enterprise when it falls short of national requirements and lastly to provide a minimum of subsistence for those citizens who can find no place in the economic system. When a machine becomes obsolete it can be scrapped; when a man has no niche in the economic order, he cannot be thrown aside. The

economic system by itself would abandon men just as it does machines, but no civilised society could allow the economic motive to become the only motive.

Local Authorities also impose taxation, which is known as Rates. Under the English system of local government, the local authorities are responsible for such services as police, street lighting, removal of refuse, the upkeep of roads and the supply of gas, electricity and tramways, where such services are municipalised. Unlike taxes, which are uniform over the whole country, rates vary from locality to locality. Again, unlike taxes which are levied on a variety of objects, rates are levied only on the householders or occupiers of houses in the area. Lastly, taxes contain some elements of uncertainty. The exchequer never knows exactly what the annual revenue will be. Rates are fixed beforehand, and the amount is equally divided among the residents according to the rateable value of their houses.

The rate is fixed at so much in the pound. For example, if the local expenditure needed were £1000 and the rateable value of the area were assessed at £10,000 then the rate imposed would be 2s. in the £. All houses have a rateable value assigned to them, so that if a house were valued at £40 a year then the occupier would pay forty times 2s. or £4.

There have been various criticisms levelled at rates as a method of levying the local income. It has been pointed out that some professional people have to live in a better house than they can really afford, while some people who can afford to live in a larger house may deliberately choose a smaller house to avoid paying high rates. So that the canon of justice may be evaded in rate assessment.

Again, there has been a demand to equalise rates over large areas, for the demands on poor areas are, relatively to wealthy areas, very large; so that poor areas, simply because their burden is already great, are further burdened by high rates.

It is further contended that the income tax returns for

national purposes would be a far juster indication of ability to pay than the size of the house in which people dwelt.

But both the municipality and the state are not always open to argument from the aspect of equity or even of economic purpose. Political influences play a large part, and the inertia of what already exists is difficult to overcome. A new tax, a new system of rates, will always disturb the political calm and will be avoided by politicians.

CHAPTER XIX

THE STATE AND TRADE

ECONOMICS and politics frequently meet, but rarely so often as over the problem of tariffs. Should industry and commerce be regulated by the state or should goods be imported and exported freely without any state intervention?

The tradition of state intervention is very powerful. In the fourteenth century, when international trade began to develop, the state carefully regulated both the import and the export of goods, with a view to enriching England. Because money was regarded as the stable form of wealth, only gold and silver were allowed to come into the country in exchange for goods exported. This is known as the Bullionist Theory of Trade. Exports of goods were encouraged, which were to be paid for in specie. Imports of goods were discouraged, as well as the export of gold and silver to pay for them. Laws were passed to prevent the country being "drained of gold."

As most countries shared similar beliefs on foreign trade, little trade was done, and state regulation merely hampered the free flow of goods.

Gradually it began to be recognised that there were some goods that England *had* to import. They were needed at home and yet could not be produced at home—as for example spices from the East. The rigid Bullionist Theory was therefore modified to the Mercantile Theory. The influx of gold and silver was still aimed at. But the method was altered. It was argued that some goods might be imported, either for home use, when they could not be produced at home, or for re-export to Europe in exchange for gold and silver. But in any case the amount and kind of goods imported were to be

less than those exported. So a Favourable Balance of Trade would be secured.

Laws were therefore passed to restrict and if possible prevent the import of such goods as could be produced at home, while the export of goods was encouraged by bounties. Protective duties on imports and bounties on exports were the key to this Mercantile Policy which aimed at "power rather than plenty." The motive, that is, was political rather than economic. The nation deliberately subordinated economic gain to political purpose. It aimed at security rather than at abundance.

Of course this policy would ultimately have defeated itself. If the inflow of gold and silver continued, the result would be that prices would tend to rise. This in turn would mean that high prices would encourage imports and discourage exports—in spite of governmental regulation.

As the Industrial Revolution of the eighteenth century proceeded, the need for foreign material and for foreign markets became urgent. A theory therefore grew up that the Mercantile Policy was obsolete and that what was now needed was complete freedom to import and complete freedom to export. The Mercantile Policy was then gradually abandoned. Laws were passed which repealed all the regulations with regard to the entry and the export of goods and Free Trade was ultimately adopted as the English policy.

The present-day controversy between Protectionists and Free Traders is not entirely an economic controversy. Political feelings influence the discussion. Industries have in fact become localised in certain areas and in different countries. Generally they have settled where conditions have best suited them, although political considerations may have been as powerful as economic influences in deciding this localisation of industry. Many states desire to alter the localisation of industries which has developed as the result of historical and economic causes. They attempt to do this by imposing a tax

or duty on goods imported—a duty which of course is not imposed on similar goods produced within the realm. A series of such duties is called a Tariff.

There are many reasons given to support the imposition of such a tariff. It is argued first that if any national industry is protected from foreign competition then it will prosper. Therefore if all national industries are protected against the importation of foreign goods, they must all succeed.

Now it is true that a particular industry will succeed if an artificial security is created by prohibiting the import of any goods which will compete with it—that is if the law creates an *artificial* scarcity. But the customers of that industry do not gain; they have to pay artificially-created high prices for the product. So that if all industries were protected, then the consumer would have to pay high prices for all his goods, and in addition the export trade would suffer because at the high prices ruling, goods could not be sold abroad.

For example. Let us imagine that a certain type of penknife costs 3s. in England and it is found that a similar penknife, when imported, can be sold for 2s. 6d. If the imported penknife was sold for more than 3s. then there would be no demand for a tariff. Clearly the buyer would purchase the home-made article at the cheaper price.

It is because the imported knife is cheaper, that a tariff may be demanded and imposed “to protect home industry.” Now if the tax imposed was 6d. on every imported knife, then several results, argue the Free Traders, will follow.

First, the buyers would be paying a higher price for their knives. Whereas without a tariff a knife would cost 2s. 6d., it now costs 3s. Secondly, because another area was able to produce a knife at 2s. 6d. while it costs 3s. to produce it at home, presumably that other area possesses relative advantages in producing that commodity. The tariff will then artificially stimulate production, where it is not so well suited. Thirdly, the imported knives will be paid for obviously by goods manu-

factured at home. This check on imports, by a tariff, will then injure some export industry.

It is then argued that if conditions were normal and the factors of production fully employed at home then nothing would be gained by a tariff. But during abnormal times when men are unemployed and machines idle, when factories are either closed or working short time, then it is unwise to allow cheap imported goods to enter and further injure English industry. That suggests that tariffs might be used as an "Emergency Measure," to tide over a particular period of distress and as a cure for home unemployment.

Now this argument supposes rightly that the reason people buy imported goods is that they are cheaper. If they were dearer than home made goods, then no duty would have been necessary. Now if a duty is imposed to induce people to buy home produced goods, buyers will obviously be paying a higher price for their commodities than if they bought the imported commodity.

In addition, if goods cease to be imported then exports cease, for the goods sent here are not given away; they are (it has been seen) payment for goods and services sent abroad. So that if people abroad cease buying as freely as before there will be unemployment in the exporting industries. Unemployment will not have been cured. All that will happen will be that the factors of production, including of course labour, will be diverted from the exporting industries to those producing for the home market—because of the tariff. Because a duty was needed to create this diversion of the factors of production then it follows that the country is less suited for the new industry than it is for the exporting industry. Unemployment has not been cured and the burden of the change has been thrown on to the buyers, who are now paying more for their goods than before.

Another argument in favour of tariffs is that they protect well-paid workers within the country from the competition of

ill-paid labour outside. Now this contention raises two important considerations. Protection means high wages, it is said; tariffs are needed against goods produced by "sweated" labour. First then, it is untrue that high wages cause dearer goods, and low wages of "sweated" workers cheap goods. Generally low wage earners are apt to be inefficient and frequently low paid labour is more expensive than highly paid labour. If English labourers are highly paid, receiving, let us say, double the wages of Japanese labourers, but at the same time doing four times the work, then English products will be cheaper than Japanese.

Wages too may not be the only cause of dear goods, for the efficiency with which the industry is organised, the machinery used, even the climate will determine output and price. Even if the wages paid were the only cause of the high price of the commodity, it is still doubtful whether it would be sound economically to maintain high wages in one industry at the expense of the whole community and at the expense of the export trade.

It has, however, been contended that in spite of these arguments the competition of low wage labour is really serious and that it does undermine the standard of living of well-paid labourers. For it is pointed out higher wages will mean higher productivity only up to a point. When the work is mechanical and wages are sufficient (not so high, of course, as in the home industries) competition is generally very destructive of the higher level. And although it is true (using the Marginal Productivity Theory of wages) that labour costs equalise themselves out by the flow of capital to areas where wages may be unduly low, yet such would only be the case in the long run. During the period of transition, over a short period, incalculable injury may be done to the better paid workers. Moreover the flow of capital abroad may result in a dearth of capital at home with consequent unemployment. There appears therefore a powerful case for a tariff against

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"sweated" goods when they compete with home products.

Against this Free Traders contend that the difficulty now is to decide scientifically what exactly is meant by the term "sweated" goods. The standards of nations differ so widely that wages which to an Englishman appear sweated might be the reverse, say, to the Japanese, because of the differing conditions of living and tradition in the two areas. It might therefore be wiser to rely on some such influence as the growth of Trade Unionism and of international labour regulation and of a rise in social standards to equalise the two countries. For otherwise the buyers would bear the burden of a tariff and the export industries would suffer.

It is also claimed that tariffs should be imposed to prevent "dumping." It is argued that in another realm a particular firm may enjoy a monopoly so that it can charge a relatively high price for its products. But in order to produce on a large scale, in order to secure the economies of large scale production, it has to seek foreign markets, for the home market cannot absorb the output. It can therefore sell abroad below the cost of production. Those in support of a tariff argue that the aim of the dumper is to destroy native industries and then charge the highest price he can.

Free Traders admit that wherever it may be possible to discern deliberate underselling in order to secure a monopoly some action might be taken. But they argue that if the price of the imported commodity is ultimately raised then competition will readily emerge. In addition, unless the "dumpers" are world monopolists, they can gain little by destroying a native industry, for another producer in another part of the world may undersell them. Lastly they claim that if foreign firms wish to sell more cheaply here, then buyers obviously stand to gain. It would be absurd to protect them against cheaper goods. In any case, it is argued, dumping must from the nature of the case be spasmodic and temporary and it would not be wise to upset the whole fiscal policy of a nation

to meet a temporary situation.

Tariffs have also been strongly defended in those cases where they nurse an "infant" industry to maturity. It is argued that the instrument of the tariff might be used to divert the factors of production to an industry which could easily and cheaply be developed within the country itself, if only time were allowed for it to establish itself. The duty on the imported article would *shelter* the infant industry during the period of growth and when at last it reached maturity, the tariff could be removed.

Free Traders answer that tariffs designed to foster "infant" industries suffer from grave risks. For it would be difficult to decide what in fact was an "infant" industry. Resources may be wasted in making commodities which can really be obtained much more economically in exchange for more suitable home-made products. To look ahead in order to say which industries will grow is difficult. It risks directing the factors of production into wrong channels, for the industry may turn out to be unsuitable and never really establish itself. Those industries which are thus protected will find it convenient to remain "infant" as long as possible. For once the tariff is imposed it is difficult to remove it. No tariff could nurse to maturity an industry really unsuitable—for example tea growing in England. What is suitable may be open to controversy.

Wherever a tariff is imposed it checks the advantages which have arisen from the localisation of industry. It aims at making the country more self-sufficing by checking the import of goods. If a similar policy were followed by counties and towns—and to carry out the policy logically by each individual—then all the advantages of organisation, specialisation and division of labour which have been secured would be lost and the standard of the world inevitably fall.

Many who support tariffs recognise this, but contend nevertheless that there are advantages to be secured by making their country independent of the rest of the world, even

though one of the results may be to reduce the benefits gained from taking advantage of the special suitability of various parts of the world for different products. The country might lose in production per head; it might suffer a lower standard of living, but it would gain in independence and power, and ultimately in "welfare."

It would gain by being not so over-specialised. There would be a greater diversity of industries. While the country specialises in a few products, it risks all on the future of those products. If the supply is cut off, if the demand changes, if a substitute is found, then the loss becomes of the nature of a national calamity. Because Lancashire is so overspecialised, it suffered terribly when the supply of American cotton was cut off by the Civil War, and is suffering terribly now that the Indian markets are not available. It is admitted that a tariff may be a loss—that it may keep alive an uneconomic industry or that it may raise prices—but the loss would be relatively a lesser evil, for in the long run the country would gain. For the economic future would be less uncertain and less a matter of chance.

The opponents of tariffs answer that the economic interlocking of the world is inevitable, that specialisation is essential, that no country is in fact so overspecialised, that there always exists sufficient diversity of occupation for losses to be counterbalanced by gains.

Lastly those who support a tariff do so, not on any economic grounds but from political motive. It is argued that a people desirous of political independence must also secure economic independence. Otherwise, whenever its integrity is threatened by war, then if, for example, it has to rely on imported food, the nation itself is in danger. So that it should be wise for every nation, no matter whether the country is well adapted, to grow its own food, to foster its own munition works, to encourage its own chemical industries, for its independence hinges on these key industries.

The country must then choose how far it is prepared to live throughout the years of peace in order to be prepared for war. The choice is a matter of politics rather than of economics. Logically the best solution might be to divert all the nation's resources to the production of armaments. The last war has proved that insecurity is the result of such a search for security.

Those who advocate Free Trade claim that the greatest production per head—that is the highest standard of living, is secured when the world's resources are allowed to flow into channels where they can be employed to the greatest economic advantage (that is to those areas having the greatest relative advantages), that the economic interdependence of the world results in greater productivity and lower prices per unit of output, that it secures higher real wages than would be possible under Protection, which implies the artificial direction of the world's resources to suit particular objects. And that Tariffs once imposed are difficult to remove, for they tend to create vested interests and monopolies. When a business is failing the owner will turn to the government for aid rather than put his house in order, and the artificial shelter afforded by tariffs may even injure the efficiency of business.

There is one further argument put forward by those who favour a tariff. They agree that certain industries can never be effectively encouraged (such as rubber or rice or banana growing) no matter how high the tariff. But they wish to impose a tariff "in order to tax the foreigner", "to make the foreigner pay." It may be possible to imagine some unique case where the imposition of a duty would not raise prices to the buyer or affect the amount sold. But if the foreign seller still sells the same amount, the tariff would afford no protection to the native industry. And if, of course, the duty is added to the cost of the article, the consumer would suffer.

A case *might* however exist if the home country had a monopoly of any commodity—whose demand was inelastic.

If the "foreigner" needed this commodity, the State could impose a "duty" on *exports* and so "tax the foreigner." But such cases are extremely rare and a duty would of course encourage the production and use of substitutes, and so injure this exporting industry.

CHAPTER XX

ECONOMICS AS A SCIENCE

THE word *Economics* comes from a Greek word which means Household Management. It implied care in obtaining the household income, careful planning in its spending, care in its distribution among the members of the household.

The word *Political* is also of Greek origin. *πόλις* (polis) was the Greek for City State—the Greeks had not yet developed a nation state. So that Political Economy was used to describe the study which related to care in the getting and the spending of the income of the state.

When modern economists use the term Political Economy, they may mean the study of National House Keeping, more often the simple term Economics is used, to describe the "Science of Wealth." Many efforts have been made to define accurately this science of economics. Some economists say simply that Economics deals with the "principles of wealth getting and wealth using." Professor Marshall defines it as "a study of man's actions in the ordinary business of life; it inquires how he gets his income, and how he uses it. Thus it is on the one hand a study of wealth and on the other and more important side, a part of the study of man." Some economists merely say that economics is the "Science of the Wealth of Nations."

The difficulty which exists in formulating a satisfactory definition points to the essential peculiarity of economics as a science. Some have doubted whether it is right to call economics a science at all. Science, they urge, is exact knowledge, yet in economics, different theories pass for truth at different times, and at any given time economists disagree

among themselves. How then is it possible to give to something so vague and contentious the name and dignity of a science?

This criticism can however be easily met. Taking science to connote just "Scientia" or Knowledge, it is possible to divide Knowledge into two main divisions: (1) Physical Sciences such as chemistry, physics, zoology, astronomy, geology—which deal with inanimate matter and which can therefore be treated objectively and (2) Social Sciences—which deal with Man in his various social relations, politics, (which treats of man in his relation with the state) ethics (which deals with how a man should behave in his contact with his fellow men), law (which treats of the rules which are considered binding on all men), economics (which deals with man in his activities as a worker and spender). All the social sciences treat of Man as the centre of study. There has to be as much exact knowledge about these social sciences as about physical sciences.

For the purpose of study, it is essential to isolate man's activities, although in practice it may be difficult to do so. For study, then, man's relations with other men in the sphere of earning a living are isolated and the study is termed economics.

Now because economics is a social science, because it treats of Man (as in all social sciences), personal bias enters into the conclusions reached by even the most careful student. One school claims to follow Marxian economics, another Christian economics, another Bourgeois economics. Because they all treat of Man, one school will give an ethical interpretation to man's economic activities, another a political interpretation, still another, a religious interpretation.

The problem is further complicated. If Economic Man (the fiction which some have sought to isolate for study) seeks wealth, then what is wealth? St. Francis sought wealth, spiritual wealth, through poverty, the ascetic seeks wealth

through prayer and self-abnegation. For wealth is ultimately an ethical concept. If the economist goes behind wealth and decides that wealth is only sought to secure welfare, then the problem is not eased, for how can one measure welfare and happiness?

It is best for every student to admit bravely that he has some bias—even unconsciously—and to hope that honest study and careful thinking will make it possible for him to treat even the social sciences objectively.

If it is argued that Economics cannot be a science because former theories have passed for truths and because economists disagree, then (in addition to remembering that bias may have entered into various conclusions) exactly the same criticism can be applied to the physical sciences—the so-called exact sciences. Chemists once held the phlogiston theory, physicists once accepted the caloric theory of heat, medical students once worked on the theory that “humours” and the heavenly bodies were the causes of health and disease.

And even to-day physicists and astronomers hold different and conflicting opinions on their subjects of study.

Like all sciences economics passes through the three stages of hypothesis, theory, law. The same experimental process that goes on for example in chemistry is impossible in any social science. It would be impossible to put man in a crucible or test tube, in order to watch his reaction to certain stimuli. Even if isolated communities have attempted, by their lives, to prove certain economic theories, other factors have invariably entered to complicate the economic simplicity of the experiment. For religion, politics, ethics have at the same time acted on the community. Social experiments involve intricate problems, such as chemical experiments rarely meet. For man has a will of his own and is influenced by motives other than economic ones. Yet for study it is essential to keep apart economic motive and economic action.

Like all sciences also the science of economics follows the two

traditional methods of discovering truth, the Deductive and the Inductive.

The Deductive Method accepts a few fundamentals which are assumed to be true and beyond all doubt. On these a structure of reasoning is built and conclusions ultimately based. This process is continued until a very complex body of knowledge is attained. The English Classical economists adopted the Deductive method. They tried to base all economic knowledge on a few (apparently) self-evident truths. As in the case of geometry, a few axioms were accepted and the theories built on them. These axioms they called laws, and these Economic Laws were considered the very foundations of economic science. It is obvious to-day that in any social science, Laws cannot have the same rigidity as they have in physical sciences. It is, for example, a scientific law that water finds its own level. Is it an Economic Law that every man knows his own interest best? The boundaries between the physical sciences are hazy; the frontiers between the social sciences are hazier still.

The Deductive Method is balanced by the Inductive Method. A large number of facts are collected. From these facts, generalisations are deduced and these generalisations are further tested in the light of new facts. Statistics, mathematics, economic surveys, are all brought in to the help of economic reasoning and knowledge. It is obvious that the two methods are complementary.

Like every other science, Economic Science has to employ a technical phraseology of its own. It has given specialised meanings to words of everyday use. Common speech is serviceable for everyday purposes but the precision and accuracy of a science entail a scientific vocabulary. Not many new words, it is true, have been coined, but words of ordinary use—like rent, interest, profit, wages—have been endowed with scientific precision that leaves their meaning beyond doubt.

Economics is still a very young science. Only since the rise

of the great economic problems in industry and agriculture during the eighteenth century has it received specialised treatment. But like most sciences, its theories have generally reflected and mirrored the environment of the period during which they have been enunciated.

The Greeks were the earliest people to think at all scientifically of the problem of economics. Plato in his *Republic* sketched an ideal society, perhaps the first Utopia; Aristotle in his *Politics* denounced usury, for he considered that money was by nature barren. The Romans thought that the problem of earning one's living was hardly a serious study and deprecated trade as being not a fit occupation for a Roman.

On the collapse of the Roman world, the Dark Ages that followed provided little incentive or motive for serious study. During the Middle Ages, industry was organised in guilds, and agriculture under the manorial system. Capital was still relatively unimportant except for wars. The two greatest writers on economic subjects were Thomas Aquinas, who denounced usury, and Nicholas Oresme, who formulated the law generally known as Gresham's Law—that bad money drives out good.

Industry and commerce developed rapidly with the Renaissance. In England, Sir Thomas More portrayed an ideal society in his *Utopia*, but the greatest development was the emergence of a compact school of thought on economic policy. It is known as Mercantilism, sometimes also as Colbertism, after the famous exponent of and experimenter with this policy, the French Minister, Jean Baptiste Colbert. The doctrines were really the economic expression of the contemporary militant nationalism. In order to secure a favourable Balance of Trade, exports were encouraged and imports were hindered by heavy duties. It was believed that in any exchange of goods one party must gain, and the home country was therefore not to be the loser. The best exponents of this theory were Colbert in France and Thomas Mun in England.

Other writers with Mercantile views were Sir William Petty, whose *Political Arithmetic* is interesting, for he first employed statistical method, David Hume, the historian and critic of the Mercantile school, and Sir James Stewart, the last of the Mercantilists, whose "Inquiry into the Principles of Political Economy," published in 1767, preceded Adam Smith's "Wealth of Nations" by nine years.

The reaction against Mercantilism was most pronounced in France. Here there grew up the School of Physiocrats (so named after a book called "*La Physiocratie*," written by Dupont de Nemours in 1768). The most prominent members of this school of thought were Dupont de Nemours, Mercier de la Rivière, Mirabeau the elder, possibly Turgot, above all Quesnay.

They held that there is a Law of Nature which governs all man's activities. They tried to discover this law. Quesnay thought he had discovered it in the economic sphere and he announced it as "to secure the greatest amount of pleasure with the least possible outlay." Competition then was the best guide to follow. The state should therefore remove all artificial barriers to free economic action and simply protect life and property. These doctrines were summed up as "*laissez faire et laissez passer*," for what secured the greatest wealth to the individual it was thought also secured the greatest wealth to all.

"Nature's work" (such as agriculture and fishing) was the true source of all wealth—this alone yielded a "net product." Man's work did not; for manufacture merely changed the form of things and commerce only distributed them. Taxes were therefore to be levied on land alone, for land alone yielded a surplus. The only productive workers were therefore such workers as farmers and fishermen. In addition to these productive workers, society also included a possessing class, but below these there existed a sterile class of manufacturers and merchants. These views are interesting, for the

roots of many present-day economic beliefs can be traced back to the Physiocrats.

The outstanding figure in economic science and literature, the person who converted vague theories into a serious science, was Adam Smith. He was Professor of Moral Philosophy at Glasgow University. His "Wealth of Nations" was an intermediate book between his "Theory of Moral Sentiments" (1759), which dealt with social philosophy, and his work on Law and Politics, on which he was engaged when he died. He was the earliest of the English Classical economists and his writings were interpreted by his followers to justify *laissez faire* in English economic life.

Thomas Robert Malthus in 1798 published his "Principles of Population," in which he gave the world the idea of population increasing faster than the food supply, and which was used as a justification of, for example, the Poor Law of 1834 and of the belief in the inefficacy of social legislation.

In 1817 there appeared David Ricardo's "Principles of Political Economy and Taxation," in which he enunciated his theory of Rent and a vague Labour Theory of Value. His Theory of Rent has been amplified to include not merely the payment made for the use of land, but also the payments made to all agents of production. The social and political consequences of this Theory of Rent have been enormous. For example Ferdinand de Lassalle and Karl Marx base some of their socialistic theories on Ricardo, who thus became both "a prop and a menace to the middle classes."

Under the Ricardian influence, economic science became so hard and abstract that it became known as the "dismal science." Two text-books were written to cover the ground of economics as accepted by the English Classical economists. They were "Political Economy" by J. R. McCulloch in 1825, and "Political Economy" by Nassau Senior in 1836.

The whole economic structure of society, they agreed, was based on five main pillars. They were—

1. Every person desires to secure as much wealth with as little effort as possible.
2. The Malthusian Theory of Population.
3. The Law of Diminishing Returns as applied to Land.
4. Interest is the price of Abstinence.
5. The Ricardian Theory of Rent.

These ideas in England became the bases of the "Manchester School" of thought, with the twin policies of

1. Free Trade externally.
2. Free competition internally.

In France, the Classical Economists were the Physiocrats. To these should be added, as representing French thought, Jean Baptiste Say and Bastiat, who in doctrine approach very near the English Classical school; the latter even saying that "a competitive society was not only the best possible but also the best conceivable."

In Germany, however, the contemporary economist Friedrich List in his "National System of Political Economy" (1841), rather established the basis for a strong national economic unit—strong because of its economic independence.

A scholar who was rooted in the English Classical school, but who yet foreshadowed many new developments, was John Stuart Mill, whose "Principles of Political Economy" (1848) was the text-book of mid-Victorian England.

The two outstanding critics of Victorian economics were Karl Marx and John Ruskin. Ruskin began his criticism in the *Cornhill Magazine* in 1860, but the outcry was so intense that Thackeray, who was the editor, had to discontinue his articles. Ruskin published them in book form in 1862 under the title "Unto this Last." His criticism can be summed up in his phrase "We have learnt to produce everything but good men." For he contended "there is no wealth but life. That country is the richest which nourishes the greatest number of

noble and happy human beings." Marx, using Ricardian principles, published in 1867 his "Das Kapital." With Karl Rodbertus and Ferdinand de Lassalle, he is the founder of "scientific" socialism in contrast to the earlier utopian socialists. Civilization, Marx argues, has a permanent economic basis. As the world is divided into those possessing property and those only possessing their labour, the "class struggle" is inevitable and from this is induced the inevitability of the extinction of capitalist society to make way for a socialistic world.

Since Mill economic science has developed apace. The Deductive Method of the Classical economists has been supplemented by historical research, by the application of statistics, by study of contemporary economic activities of different peoples, even by the application of psychology to help the discovery of economic motive.

The Historical School is best represented by Sir William Ashley and the Webbs, the Mathematical School by W. S. Jevons, who in his "Theory of Political Economy" (1871) discussed the very essential conception of Final Utility, and Dr. W. Marshall, whose "Principles of Economics" (1890) carries on the English tradition from Adam Smith through Mill to modern times.

The Psychological School is best represented by Menger and Prof. Böhm-Bawerk. It is still almost exclusively an Austrian School.

In more modern times there is a growing tendency to concentrate on the problems of distribution and the best known names are J. H. Hobson in his "Work and Wealth" (1914) and Professor Pigou in his "Economics of Welfare" (1920).

CHAPTER XXI

THE POPULATION PROBLEM IN THE TWENTIETH CENTURY

IN 1798 Malthus wrote his book on Population and startled Mankind with spectres of over-population and of Man outgrowing his food supply. He raised the problem of Population to social concern. When, as a consequence of his challenge, the first Census was taken in 1801, it revealed that the population of England was 9 millions. That figure was considered incredibly and impossibly high, and Cobbett shrieked, "It is a lie, the biggest lie ever put in print, even in romances."

A hundred years later, by 1898, the position had assumed singular urgency. Our population figures before 1801, although checked by every historical evidence, remain largely guesswork. From 1801, Censuses have been regularly taken and since 1837 births, marriages and deaths have been recorded. This slow accumulation of exact data has proved of service to the economist. Till the '70s every census return had revealed an increase in the numbers of our people. Our Victorian prosperity was based on an expanding population. The birth rate was increasing, the death rate was progressively declining and the survival rate was such that between 1800 and 1840 our population doubled itself and by 1900 had again increased more than 75%.

For statistical purposes the Birth Rate is generally measured by the number of children born every year in proportion to every 1000 of the population; the Death Rate by the number of people who die every year in proportion to every 1000 of the population. Of course these rates will vary, according to:

1. The Age Composition of the population. If for example, of two Islands A and B, each having a population of 1000, Island A has a population younger than that on Island B, then

it would be normal to expect that the birth rate on Island A will be higher than on Island B, where the age composition of the population is older.

2. It will also vary according to the proportion of men and women in the population. To carry it to the extreme, a population consisting entirely of one sex would record no birth rate. The more equal the proportion of men and women of marriageable age there exists in the population, the larger will be the birth rate.

The difference between the Birth Rate and the Death Rate would indicate the Survival Rate, which records the growth of the population. It is of course possible to have a high Birth Rate with a low Survival Rate. If the Birth Rate, for example, on our Island were 10 and the Death Rate 8, the Survival Rate would be 2. If the Birth Rate and Death Rate were both 10 then the numbers of the population would be stationary. And if the Birth Rate were 10 and the Death Rate 12 then the population would decline. The reverse too is possible, that is a low Birth Rate and a high Survival Rate. If the Birth Rate were 5 and the Death Rate 1, then the Survival Rate would be 4. There is still a further fact to note. If for example on our Island, the Birth Rate and Death Rate both fell to zero, that is no babies were born and no one died, then two results are clear: firstly, the population would remain stationary, but secondly the age composition of the people would increase one year, every year. The Island will contain the same number of people but they will be an older people. The Natural Increase of a people, equals therefore the excess of births over deaths.

In the nineteenth century, the rise in the birth rate and the fall in the death rate, which resulted in the increase in our population, not only reflected our increasing prosperity but were also the consequences of medical and social improvements. Before the "Industrial Revolution", families of 10 children were common; but the majority died before they were 10 years old. The birth rate was high, but so also was the death rate,

so that the survival rate was low and the population increased very slowly. But with improvements in housing, in sanitation, in nutrition and in medical knowledge it became possible for large families to survive. As a result in the early nineteenth century, the birth rate was as high as in the eighteenth century but the death rate fell, and population increased enormously. To many, Malthusian forebodings appeared to be justified. We were, they feared, becoming over-populated. They ignored the fact that wealth was increasing still faster and living standards rising.

But from about 1870 a new phenomenon began to appear. The birth rate began to fall. The mean birth rate in the decade 1871-1881 was 35.4, for the years 1881-5 it was 33.3. Steadily the birth rate continued to fall. In 1939 at the beginning of the second World War, it had reached the record low level of 14.9. The number of births had fallen to less than a half of what they had been in 1870. The total population had not fallen of course in the same proportion, for the death rate had fallen. People were living longer. These changes indicate two very important data in the age structure of our people.

1. We are declining in numbers.
2. We are becoming an older people.

Here is a table to indicate these demographic changes.

	Birth Rate	Death Rate
1870	35.5	22.3
1880	34.1	19.7
1890	30.8	19.7
1900	28.7	17.2
1910	24.3	13.8
1920	22.8	12.4
1930	15.8	11.9
1940	14.9	14.0

The change has already had startling consequences. When we entered the second World War, we had a population a little over 41 million, or roughly about $4\frac{1}{2}$ million more than we had in 1914. But we had 2 million fewer children under 14 and $2\frac{1}{2}$ million more people over 60 years of age. Or again, it can be put in still another way: of every hundred people living in 1876, 36 were children under 14 and 5 were over 65 years. In 1939 there were 22 children under 14 and 9 over 65.

It seems unlikely that the numbers of our declining population will be replaced by immigration. Such movements as immigration are, however, difficult to predict, particularly in the troubled world of the Twentieth Century. But it is probable that, without the intrusion of such external factors, we shall in our time be faced with the problems of a declining population and an aging population, in contrast to the situation in the century 1770-1870, when we enjoyed an expanding population and a people growing, on the average, younger.

This phenomenon is not confined to England. It affects the entire Western World, that is, all the more highly industrialised peoples and those who have been enjoying the highest standards of life yet secured by Man. Here is the population table of the Western Powers in the period between Waterloo and the eve of World War II (in millions):

The United Kingdom		France	Germany	The U.S.A.
1820	20.8	30.4	21.0	9.6
1871	31.8	36.1	41.0	38.5
1881	35.2	37.6	45.2	50.1
1890	38.1	38.3	49.9	62.6
1900	41.9	38.9	56.3	75.9
1910	45.3	39.6	64.9	91.7
1939	46.3	41.9	69.6	131.5

It will be seen that the relative populations of these Powers reflect their relative "power" in the world. In the long rivalry, for example, between France and Germany, especially after the Prussian victory of 1871, France was outpaced by the increasing German population, so that Von Moltke the military victor in the Franco-Prussian War could assert that every year meant another German victory over France; for France with her relatively stationary population dare not measure her strength against the growing number of Germans. While nearer home similar factors influenced our relations with Ireland. The population of Great Britain increased from 20.8 millions, to 37 millions in the second half of the nineteenth century, while that of Ireland fell from 6.5 to 4.3 millions. This had a bearing on the problem of Home Rule. In the middle of the century, Home Rule would have meant placing nearly a quarter of the population of the United Kingdom under a parliament in Dublin and was never conceded. At the end of the century it would have meant placing only one ninth and was therefore within political possibility. Population problems have obvious political consequences.

The problem has therefore become a world problem. A great international authority on population, Dr. R. R. Kuczynski, has shown that white peoples as a whole (except Russians) have not been replacing themselves since 1932. The peoples of England, Wales, Scotland, France, Belgium, Norway, Denmark, Czechoslovakia, Sweden, Switzerland, Germany, Australia and the whites of the U.S.A. have birth rates which are below the replacement level. In Canada, New Zealand, Italy, Poland and the Netherlands, the birth rate is just above the replacement level. While in contrast, in India, China and Russia whose total populations account for half the human race, population is growing at a pace that many find disturbing. Before the war the population of Russia was growing at a rate of 30% per annum. In India, population is growing at a rate of 100,000 a week; ten babies are born every minute.

By statistical data, it has become possible to foretell the replacement of our population. It is not guesswork. For example we know the number of people born in England in 1939. The census records that figure. Immigration is of course likely, but the number admitted is relatively negligible and may be balanced by the number emigrating. We know also from the census returns how many girls, that is how many potential mothers, were born. It has been assumed that the child-bearing age of women can be taken as between the ages of 15 and 50. We must allow, that all the girls born will not reach motherhood. Some will die, some will not marry, some may be sickly and incapable of bearing children. But within these limits we can say that the number of future mothers is fixed. These mothers are already born. That figure cannot be altered. We can calculate how many girls born in 1939 will be 15 in 1954. We can similarly calculate how many women of child-bearing age (that is between 15 and 50) will live in any future year. Now for the population to replace itself, each woman must bear at least two children and these two children must reach parenthood. If the average is less than two, the population must later decrease; if the average is three, the population will later increase by 50%.

As a consequence, in order to foretell the future trends of population, the Fertility Rate is as important as the Birth Rate. The Fertility Rate is the number of births per 1000 women, between the ages of 15 and 50, in any year. There is of course a relationship between the Birth Rate and the Fertility Rate, nevertheless the Birth Rate may be high when the Fertility Rate is low. For example, if on our Island A, the number of women between 15 and 50 were 1000 and each woman had on an average of one child, then the Fertility Rate would be 1000. But the Fertility Rate would be the same on the Island, if the number of women of child-bearing age were only 500 but if each bore on an average two children. The Birth Rate will depend on the number of births for every 1000 of the population.

In order to forecast the future trends of population the Net Reproduction Rate has further to be calculated; that is the average number of girls that will be born in the future by a girl born now. The Net Reproduction Rate so takes into account age and sex as well as mere numbers of births and deaths. It is arrived at by calculating the proportion of girls born to the women of this generation, who will live to become the mothers of the next generation. For example, the Census returns will tell us how many girls were born in 1939. Life Tables (such as are used by any Insurance Company) will indicate how many of these girls will reach the age of 16. (It is assumed, that a girl can begin bearing children at 15.) If we take that figure and multiply it by the Fertility Rate for women below 16, that will tell us the number of children that girls born in 1939 will bear in 1955. We repeat the calculation for girls who will reach the age of 17, and multiply it by the fertility rate of women between 16 and 17, and we continue this process till we have included women to the age of 50. When the results are added up we can find out how many children, a 1000 girls born in 1939 might be expected to bear. Suppose the number were 3000; this would include boys and girls. If we assume that the proportion of girls to boys is, let us say, 48 to 52; then 1000 girls born in 1939 might be expected to bear 1440 girls. ($\frac{48}{100} \times \frac{3000}{1}$). The Net Reproduction Rate is 1.440. If such were the case, the population would increase. A Net Reproduction Rate of *one* (called Unity) means that each child-bearing woman would be replaced by one other woman. If that were to happen then the **total** population (other factors being equal) would remain stationary. If it were continued, then both the numbers and the age-composition of the population would remain stable.

The Net Reproduction Rate for the year 1939 in England and Wales was 0.8. The actual number of our population is increasing but that is due to the fact that a large number of elderly people are still alive, who were born when our birth

rate was still high. But although the span of life has been extended, in the end they must die. If the Net Reproduction Rate continues as it is, then the population must decrease by $\frac{1}{5}$ in every generation.

Based on such statistics, many estimates have been made on the future trends of our population. One startling calculation is that by 1975 our population will have fallen to about $31\frac{1}{2}$ millions and by 2035 to $4\frac{1}{2}$ millions. We should then have a population of the size we had, when Shakespeare wrote his plays, Bacon his philosophy, Milton his poetry, Gresham his economics. But there would also be a difference. For not merely will numbers have decreased but also the age-composition of our people will have increased. To-day 25% of our people are already above 50 years of age. By the year 2000, there will be less than a million children under 15 but more than $6\frac{1}{2}$ million people above 65. We are growing smaller in numbers and older in years.

Some economists envisage this depopulation of England with misgivings. Many regard it as racial suicide. Some of the results forecast have been:

1. This sharp decline may drive population below the optimum figure for the period and so reduce the wealth per head of our people. We shall become a poorer people, as well as an older people.

2. A reduction in the number of our people means a reduction in the numbers of consumers. It is argued that our vast productive capacity will outstrip consumption, as the numbers of consumers decline. This may lead to grave unemployment. Others however argue that the decline in numbers might be compensated by a rise in living standards, so that effective consumption need not suffer. The problem of production, geared to abundance by mechanical improvement and scientific specialisation, yet faced by a fall in consumption from a falling population, is of concern to all.

3. It has further been pointed out, that this decline in

numbers may make it more difficult to recover from our recurring slumps. Trade depressions may therefore become more persistent. In the past, recovery has been aided by an increase in the number of consumers. An increasing population has increased demand. This has stimulated production and ended the slump. This recovery-factor will in the future be lacking. There will no longer exist this automatic corrective to trade depressions. On the other hand, others argue that with a successful policy of full employment, this problem need not arise.

4. The change in the age-composition of our people will also be reflected in industry and commerce. There may probably be a fall in demand for goods for children, youths and adolescents and an increase in the demand for goods for people of middle age and old age. There may be a demand for less footballs and more bath-chairs; for less toys and more slippers. It has been said, that already it pays doctors to specialise in the treatment of the diseases of the old, for in proportion to the population, there are more of them.

5. An older people may be less adventurous and inventive. The pioneering spirit weakens with age. So that industrial progress may wane and economic life become more static. The dominance of old age will become more pronounced in every walk of life.

6. An older people too is less mobile. The demand by new industries (in new locations) for labour has been met in the past by the young and mobile who were able to leave their homes and to work to new processes. Growing immobility of labour will make for greater unemployment.

7. Moreover an older and smaller community will have greater burdens to shoulder:

(a) Our Public Utilities have been built up to meet the demands of 45 million souls. It has been seen that the greater the demand for their services the cheaper can they be supplied, per unit. A reservoir for example can supply 10,000

people as well as 1000, but when it supplies only 1000 people then, the overhead costs being relatively constant, the charge to the individual must rise. Now our railways, our electricity undertakings, our gas works, our very roads meet the needs of 45 million people. Their costs remain constant, even if the population falls. So that they will cost more, per head, to maintain.

(b) Even the National Debt and other relatively fixed charges may become a heavy burden. Spread over 45 millions it may amount to about £50 per head. But spread over a smaller number, the burden per head of the population will rise.

8. Social services may become also a heavier charge. If, for example, only 2 million people receive retirement pensions, the charge per head of the population will be easier to bear than if 6 million people receive them. A smaller productive population will have to support a larger pensionable population.

9. In the past many of our young and virile have gone to people the Dominions. But some economists suggest that in the future, it might be unwise to allow that section of the population, whom it had cost so much to train for the future, to withdraw their productive capacity from the Motherland.

10. Lastly, it has been suggested that on moral grounds, it would be a tragedy if we, with such high cultural achievements, should allow our civilisation to decline.

In all these ways, the economic problems of a declining population are bound up with wider social problems. This change in the pattern of population distribution, has offered a challenge which legislation is attempting to meet (by e.g. pre-natal clinics, family allowances, free meals and milk for school children, etc.).

In order to study such problems, with a view to social action, a Royal Commission has been appointed to investigate the causes of this changing drift of our people and to suggest proposals to arrest this decline.

CHAPTER XXII

THE PROBLEM OF INTERNATIONAL TRADE AND FOREIGN EXCHANGE

THE wars of the twentieth century dislocated International Trade, impaired the Foreign Exchanges, and helped to create a desire for economic self-sufficiency or Autarchy. The problems of Free Trade and Protection had already assumed international concern during the nineteenth century. In the twentieth century economic nationalism created new problems for our economic society.

Their financial impact on economic life can best be studied by going back to the passing of the Bank Charter Act of 1844. This Act regulated the Quantity of currency or £ sterling in Britain in the following ways:

1. No new Bank of Issue (of Notes) could be founded.
2. It limited the right of the Bank of England to issue Notes, to an amount of £14 million beyond its cover by actual gold. This £14 million was known as the Fiduciary Issue. (It also provided that when the right to issue notes by other banks lapsed, because of amalgamation, or bankruptcy, or surrender, or by fusion with banks which brought their partnership numbers above six, the Bank of England was then empowered to increase its fiduciary issue by two thirds of such lapses. By 1900 the bulk of the country Issues had lapsed. The last bank to surrender its Note Issue was Fox Fowler and Co., when it amalgamated with Lloyd's Bank in 1921.)

The country was on the Gold Standard, which it has been seen implied:

1. That the Mint Rate and the Bullion Rate were the same.

2. That gold could be minted freely at the Mint. This implied the right of Free Mintage.
3. That Notes and Gold were interchangeable. Gold could be had on demand in exchange for Notes. Notes simply economised the use of gold.
4. That gold coin and gold bullion were freely imported and exported.

When the Bank Charter Act was passed, British commercial dominance was unchallenged. As the U.S.A. grew commercially, the Dollar too became important in international trade. There was no monetary difficulty for both currencies were based on gold, so that the exchange rates between the £ Sterling and the Dollar were relatively automatic.

If, for example, the U.S.A. exported a quantity of goods but did not import a corresponding amount, then she would have to be paid in dollars. As there was a demand for dollars they would be scarce. As they became scarce, they would rise in value, in terms of other currencies. If the two countries happened to be England and the U.S.A., then the Dollar would rise in value in terms of the £ Sterling, although of course both were based on gold. Gold would then be exported to the U.S.A., in order to buy Dollars, and so payment would be made and the exchanges would return to normal.

Then in 1914 came the first World War. Its cost was met in five ways:

1. The Treasury issued Paper Money to the sum of £6000 millions; *i.e.* inflation.
2. The Government also floated loans internally. It borrowed from its own people, some £2000 million.
3. Taxation was, of course, increased.
4. Foreign investments were sold.
5. And some £850 million was borrowed from the U.S.A.

As a consequence of the inflation, the £ Sterling lost its pre-war value, that is, its gold value. It was only worth about 3 Dollars, instead of its pre-war value of 4.8 Dollars.

This inflation had more than a monetary effect. It also affected Britain psychologically. We liked to see our currency strong. We wished "the £ Sterling to look the Dollar in the face." We wished for the pre-war exchange rates. And there was also the spectre of the dangers of inflation in Germany and Europe, where social distress and economic dislocation caused so much suffering, that we wished at all costs to avert such a possibility here. Accordingly, Winston Churchill, in 1925, secured the passage of the Gold Standard Act, which returned Britain to the Gold Standard. The Fiduciary Issue was again limited to £19¾ millions above the gold backing of the Bank of England. Unfortunately, such a drastic step produced the opposite, and, some believe, the worse evil of Deflation. (Later, Churchill gracefully apologised for his mistake in accepting "the advice of the highest experts.")

The economic distress was further aggravated by the insistence of the U.S.A. on receiving a large proportion of the war debts in gold. Consequently the British Government passed in 1928 the Currency and Bank Note Act. This authorised the Bank to raise its Fiduciary Issue from £19¾ to £260 millions, giving it powers to increase or decrease the amount by £15 millions, at its discretion. It was a departure from the Gold Standard as understood in the nineteenth century, and it eased the economic situation. But in 1929 there came the great financial crisis to the U.S.A., the forerunner of the greater Economic Blizzard that swept the world, in the years 1929-31. European countries were owing the U.S.A. large sums of money, as part of their war debts. They also owed the U.S.A. payments for the goods they had imported. America began to doubt whether this money would ever be paid. Americans therefore cut down their exports. But as their exports fell, so their unemployment mounted. To ease the unemployment situation, they passed the very stringent Hawley Snoot Tariff of 1930, making it more difficult still for goods to reach the U.S.A. in payment for American goods. By August 1931 the

drain on English gold began to tell, and as a temporary measure, the Fiduciary Issue was raised again, to £275 millions. As this did not prove sufficient to ease this monetary crisis, the Cabinet, in 1931, passed the Currency Devaluation Act, which

1. devalued the £ Sterling, by about a third, in terms of gold,
2. relieved the Bank of England of its obligation to pay gold for its notes,
3. prohibited the export of gold.

In form we were still on gold, for the Bank Charter Act was not repealed, but the "gold standard" had become a very flexible term. The effect was to increase the quantity of currency, and consequently purchasing power, and this measure, with a similar one in the U.S.A. in 1934, was one of the causes that ended the crisis.

In face of the new international situation and the consequent reactions on international trade there were now created:

- (a) The Sterling Area.
- (b) The Exchange Equalisation Account.

A. The Sterling Area:

When the British Government, by the Currency Devaluation Act of 1931, devalued its currency, it obviously disturbed the relation between the £ Sterling and the Dollar. £1 Sterling could be exchanged for only 3 Dollars. Dollars had become dearer. To prevent further dislocation of world trade, some measure of stability had to be devised. Already international trade had narrowed as debtor countries, in order to prevent their currencies being disturbed, had adopted such devices as:

1. *Tariffs*, to check or prohibit the entry of goods from the creditor's country.
2. *Quotas*, to limit the entry of creditor country's goods to percentages of various kinds.

3. *Preferences*, giving preferences to countries willing to exchange their goods.

4. *Exchange Restrictions*, by which the Government prohibited the purchase of the country's currency and so reduced the demand for it.

5. *Lowering the value of their currencies*, and so reducing the cost of their goods to the foreign purchaser. A devaluation of the £ Sterling, for example, would mean that fewer Dollars would be required to purchase a Pound, so that British goods would become cheap to the American buyer or importer, and so might overcome even the high and prohibitive tariff walls, erected to protect the home producer.

Now the British £ Sterling was still a powerful monetary unit. As a consequence the British Empire, with the significant exception of Canada, Newfoundland and Hong Kong, came in with Britain to form a Sterling Area, and were joined by Sweden, Norway, Denmark, Finland, Esthonia, Latvia, Lithuania, Egypt and Iraq in a kind of unofficial union, to maintain stable rates of exchange of their currencies in terms of the £ Sterling; to keep their rates pegged to the £ Sterling. There was nothing compulsory or coercive in this Sterling Union. It was a pure agreement. It was a voluntary arrangement to facilitate exchanges between members of the Sterling group.

B. Another result was the creation of the Exchange Equalisation Account. Within the Sterling Area, £ Sterling remained the standard by which the value of goods and services exchanged, was to be measured. But there was still need:

1. To correct any lack of balance in the exchanges between goods and services.

2. To provide for exchanges with countries that still adhered to the Dollar, at its gold value.

3. To deal with any speculative attacks on the currencies.

Consequently the Finance Act of 1932 set up an Exchange Equalisation Fund or Account. The Bank of England became

in fact the Managers of the Account, for it was allocated to the Issue Department working under Treasury Control. Parliament voted that the fund should have a borrowing power up to £150 millions (this was gradually increased to some £400 millions by 1937) as well as £25 millions from an old fund set up in 1925 in connection with the resumption of the Gold Standard. It operated in secret in order to be more effective against speculators. It worked: (1) as a correcting measure, for international trade. (2) against speculators.

1. If for example there is a surplus of Dollars, or other foreign exchange, which results from a purchase by America or any other country, of goods from the Sterling Area, the E.E.F. buys them up. If on the other hand, there is a scarcity of Dollars, or other foreign exchange, in the hands of British or other importers of American goods, with a consequent demand for Dollars (and because there is a demand for Dollars their value will rise in terms of £ Sterling) the Fund lets out the necessary proportion of its holding. Of course any other country even if not a member of the Sterling Area could buy Dollars too if it so desired.

2. It further checked Speculation in Currencies.

Speculation. In a world of risk, Speculation takes many forms. For the sake of simplicity they can be divided into:

- (a) Speculation in Commodities.
- (b) Speculation on the Stock Exchange.
- (c) Speculation in Currency.

(a) Risk appears to be inherent in economic life, for the obvious reasons that there are always risks in Supply and risks in Demand. There are obvious risks in the supply of cotton, or wool, or wheat, or rice, or wood, or diamonds, or of any raw material. The risks will depend on the seasons, or rainfall, or monsoons, or forest fires. Similarly there are risks on the side of demand. Either more or less of the commodity will be effectively demanded. Industry, of course, prefers a steady

supply at a steady price, and if possible a steady demand. So the speculator enters this specialised business of forecasting price movements, and then buys or sells in order to make a profit. His specialised knowledge gives him the flair to know which way prices are going to move. If he estimates that the price of, say, cotton will rise, then he will buy—not cotton, for he does not use cotton. He will buy “a price”, the price of cotton then ruling. If he thinks that prices are going to fall he will sell. And he takes the risk. If he forecasts badly, he will lose. If he forecasts well, he will gain. Because gains may be high, many are tempted to enter this highly specialised business. These specialised Speculators deal just in “a market”. For example, if our speculator in cotton anticipates a shortage of the commodity so that prices will rise, he buys now. By buying now, prices will tend to rise now. The higher price will check consumption now. So that present stocks of cotton are not exhausted. This will ease the pressure later, when the supply will be short. So that prices do not rise so high then.

If, on the other hand, he anticipates a fall in the price of cotton, because of an increase of supply, then he will sell forward, that is, he offers cotton for future delivery at a price lower than at present. His selling now will tend to bring prices down now. Lower prices will stimulate consumption, so that when later cotton is plentiful, there will not be the glut on the market as otherwise there would have been and of course prices will not fall so heavily. In a similar way he will buy in anticipation of a rise in demand. He will sell in anticipation of a fall in demand. And his speculation has the effect of:

1. Lessening price fluctuations.
2. Averaging supply and demand over long periods.
3. Giving the Cotton Industry a steadier price and so enabling it to function smoothly.

Therefore his speculation has socially desirable elements. So refined has the Speculative Market become that Terminal

Markets for dealing in Futures have arisen, where specialised dealers, with specialised knowledge, buy and sell future prices of raw material; and socially, their work has the effect of lessening price fluctuations. But it often comes close to gambling. During the War 1939-45, the Government closed the terminal market in cotton, bought cotton in bulk and distributed it to the industry.¹ However, terminal markets of this type still exist in other commodities.

(b) There are also speculators on the Stock Exchange. The Stock Exchange is a market for stocks and shares. It has been seen that Capital is wealth which is not consumed but is used for further production. It may be in the form of machines or of money. One is fixed, the other is liquid or finance capital. Capital can therefore be regarded as a stock of wealth, at a given time. People who own this stock of wealth can use it to invest, by financing industry, and obtain an income or a flow of returns, through the period they own the shares. But many use capital to speculate on the Exchange. They buy shares, not because they want an income, but because they hope the shares will rise, and then they sell and make their profit. When a speculator buys in the hope that the share will rise in value, he is called a Bull. A speculator may also sell shares that he has not even got, hoping they will fall in value, so that when they have fallen in value, he will buy them for less than at the price he contracted to sell. Then he is called a Bear. Bulls and Bears speculate in differences. They specialise in knowing the market, and like speculators in commodities they even-out the market price. Also like the speculators in commodities, they can do harm to themselves and to society.

1. They can buy and sell without adequate knowledge, so that price fluctuations are deeper.

2. They can deliberately falsify the market, and so secure personal gain at the expense of society.

¹ The Government have now (1946) announced that the Liverpool Futures Market in cotton will be closed for good.

They then act in a socially harmful way.

(c) Lastly there are Speculators in Currency, because there are fluctuations in the value of currency. For example, let us imagine that someone in Spain fears that the Peseta will fall in value, just as on the Stock Exchange, the Bear may fear that a share will fall in value. The Bear will sell shares he does not possess, will arrange to defer delivery and hopes, he will be able to buy them cheaper still later. So the Exchange Speculator in Spain, believing that the Peseta will fall, will sell Pesetas that he does not possess for forward delivery, hoping to be able to buy them at a cheaper rate still, before the date of delivery falls due. Such "Bear attacks" obviously accentuate the difficulties that currencies have to face. Now to prevent such Bear attacks on the £ Sterling, the E.E.F. will work to counteract them and so powerful is its force, that speculators will probably be broken in their attempt.

But there are other movements of currency. Let us imagine that a Spaniard offers his currency to the Bank in exchange for Sterling. He buys Sterling. The result will be that the increased demand for Sterling will cause its value to rise. So the E.E.F. will buy this offer of Pesetas and thus stabilise the Peseta-Sterling Exchange. Now when the E.E.F. bought Pesetas, it obviously transferred its equivalent in Sterling to the Bank. The Bank finds its account with the Bank of England increased by this money, received from the E.E.F. Then there would rise the possibility that this might cause an inflationary tendency. But the E.E.F. had discounted Bills in order to secure the £ Sterling. This has the effect of reducing the commercial banks' holding at the Bank of England, for they have to transfer to the E.E.F., the money which they pay for the Treasury Bills. The inflationary tendency will thus be corrected.

If the Spaniard decides to repatriate his money, he will then offer Sterling on the Exchange for Pesetas. To prevent this transaction having an adverse affect on Sterling, the E.E.F. will

sell Pesetas. So it will maintain the Peseta-Sterling exchange steady. The E.E.F. now also buys back the Treasury Bills and places the funds in the Bank of England and so prevents a deflationary tendency. The E.E.F. so stabilised the Exchange Rates and maintained the value of the £ Sterling.

However, the formation of the Sterling Area had a tendency to limit still further exports from America. While the value of the American Dollar was as high as 3 to the £ Sterling, American goods were dear. In face of this situation, the U.S.A. herself, in 1934, devalued the Dollar in terms of gold. In addition, she too set up an Exchange Equalisation Fund to do for the Dollar what the British E.E.F. did for the £ Sterling.

As a consequence, the £ Sterling resumed her former parity with the Dollar. The £ Sterling slowly recovered, till it was equal to 4.87 Dollars. And as this parity was maintained by the two E.E.Funds, the Sterling Area lost its original significance.

Then in 1939 came the second World War. Britain acted promptly:

1. In August 1939, by the Currency Defence Act, the support given to Sterling by the E.E.F. was withdrawn. By Act of Parliament, the Fund was used for war purposes.

2. In September 1939 the Fiduciary Issue was raised from £300 millions to £580 millions, and as the war proceeded, it was again and again raised, until by May 1945 it had reached £1300 millions. Obviously the link with gold had become very tenuous indeed. And the £ Sterling again dropped in value in terms of the Dollar to somewhere round 4 Dollars. Again it became necessary to conserve as much as possible of Dollar exchange. This need, although mitigated by the Lend Lease Arrangement, which came into operation in March 1941, was however still urgent, because the Lend Lease supplied by the U.S.A. far exceeded the goods and services received by her, by reverse Lend Lease.

As a consequence the Sterling Area was revived as a Bloc,

consisting of those countries who were willing to pool their resources in Dollar exchange for common use. The Sterling Bloc survived the war. It was composed of much the same realms as had formed the Sterling Area. Any country whose holdings were employed for purposes not its own was compensated by a corresponding sum in Sterling.

By September 1945, Lord Halifax summarised the situation, and voiced the anxiety that the world was faced with:

1. Either a Sterling Bloc in competition with the Dollar Bloc.
2. Or some form of collaboration.

Collaboration seemed to be the saner course.

The uncertainty of and the desire for saner International Trade in the future led to many plans.

The Keynes Plan, suggested by Lord Keynes, a Director of the Bank of England and Adviser to the Treasury, comprised four main proposals.

1. Just as the banks of England are linked to the Bank of England; just as they keep their accounts in the Central Bank, and their accounts regulate and determine the Credit System of the realm and so enable transactions to take place far beyond the actual gold or cash in evidence, (and such credit makes possible the vast network of internal trade) so Keynes suggested the possibility of a kind of Monetary Fund or World Bank, to act as a Central Bank for the Central Banks. It would link the National Central Banks in the same way that the commercial banks of a country are linked to their Central Bank. The Central Bank of a nation keeps the accounts of the commercial banks, the commercial banks keep the accounts of their customers. The proposed World Central Bank would keep the accounts of the national Central Banks. Further, just as individuals and firms transfer their payments by cheques on commercial banks, just as commercial banks transfer payments

to each other, by cheques on the Central Bank, so the national Central Banks would transfer payments from one to another, from accounts to be opened in the World Central Bank.

Previously if exports and imports between two countries did not balance, a transfer of gold would have had to be made. The World Bank would make such actual transfers unnecessary. Transfers would be made by book entries; for the World Central Bank would keep the accounts of each member country in respect of credits and debits arising out of international trade.

2. The second suggestion is that these transfers should be made in a new international unit to be called the *Bancor*. (Lord Simon prefers it to be called *Moneta*.) This international unit would have a gold value, but that value could be changed to meet the needs of either the expansion or contraction of the quantity of money needed for world-wide monetary transactions.

3. The third proposal is even more startling. As the system develops, the accounts of some member states will be in credit, while others will be overdrawn or in debt, just as in the case of customers of ordinary banks. Hitherto this disequilibrium on an international scale has been corrected by a transfer of gold. But such a transfer would now be avoided. Still, it may happen that a member state may be overdrawn too long or be overdrawn too much. For if a country imports more than it has exported, then it may have to pay more than its holding in the World Bank would warrant. If, on the other hand, a country exported more than it has imported, then it will be in credit. In order to readjust an overdraft, there would be, as in the case of ordinary bank practice, a charge in order to compel the country to reduce it. But a lack of balance in international trade need not be, as is the case in trade within the realm, the fault of the debtor country. The debt could be discharged by sending goods or services, but the creditor country may refuse to accept such goods. It may impose tariffs to prevent

the entry of goods to pay for the goods exported. The debtor country could pay, but not in gold, and the creditor country may demand payment only in gold. To meet such a situation, the Keynes Plan proposes that creditor countries should pay a charge for their funds that are lying idle, in order that they make arrangements to reduce their credits; which may of course mean to reduce their tariffs.

4. It is also suggested that just as commercial and central banks use their funds to finance industry, so the national credits in this Central Bank need not remain idle. They too could be used to finance the productive activities of weaker realms.

Gold is still maintained as the standard of value; for its historical and psychological value is very powerful. But the proposals sought to prevent the anomaly of a country with great material and labour resources being nevertheless unable to function monetarily. For the proposed international currency does not dispense with gold, if it may supplant it. For the amount of money available will not be linked to any arbitrary quantity of gold.

A somewhat similar plan has been suggested in America by Mr. Harry White, which, like the Keynes Plan, is designed to facilitate international trade. While Keynes' World Bank would act as a kind of International Clearing House, the White Plan envisaged a United and Associated Nation's Stabilisation Fund. The American institution would be more like an International Bank, for the members on joining must contribute gold, their own currencies and government securities, as their proportion of capital. Like the Keynes' Plan, the accounts are to be kept in an international currency unit, White suggests, in a unit to be known as the *Unitas*. The *Unitas* however is more rigidly based on gold than is Keynes' *Bancor*.

It was against such a background, that the Bretton Woods Agreement was signed in July 1945, in New Hampshire, U.S.A.,

at a Conference attended by representatives of forty-five nations, proposing the creation of:

1. An International Monetary Fund.
2. An International Bank for Reconstruction and Development.

1. *The International Monetary Fund* (I.M.F.) has for its objects:

- (a) International Monetary Co-operation.
- (b) The expansion and balanced growth of International Trade.
- (c) Exchange stability.
- (d) The avoidance of competitive exchange depreciation.
- (e) The elimination of hampering foreign exchange restrictions.
- (f) The use of its resources to members under adequate safeguards.

2. *The International Bank for Reconstruction and Development* (I.B.R.D.) has for its objects:

- (a) To assist Reconstruction, Reconversion and development of productive facilities to peace-time needs.
- (b) To promote foreign investment by means of guarantees.
- (c) To arrange loans so that the more useful and urgent projects are dealt with first.
- (d) To assist a smooth transition to peace-time economy.

The Agreement came into force in January 1947.

The I.M.F. began exchange transactions on March 1st, 1947.

CHAPTER XXIII

THE PROBLEM OF CURRENCY AND THE BANK OF ENGLAND

THE financial history of England is linked with the history of the Bank of England. From its inception in 1694 it has acted as the Bank of the British Government. So that while in law it was a private company, it was in fact a national institution. The Government in 1694 needed some £1,200,000 to finance the war against Louis XIV. The need and the risks were so considerable, that the Government of William III was prepared to pay 8% in interest. The founder, William Patterson, was clear-headed in monetary thinking, and foresaw the need for credit to finance the commercial expansion taking place in the seventeenth century. There is a legend that he explained to his colleagues that "the Bank would receive interest on all monies which it created out of nothing." It proved to be one aspect of banking truth—for the Bank sold credit and prospered. It helped to finance the Industrial Revolution. It financed the Government through the long struggle against Napoleon. But the suspension of Cash Payments during the long period 1797–1821, with its economic consequences, predisposed the nation in favour of "sound money", of gold, in preference to notes; but if there were to be notes, then they were to be notes backed by gold.

In 1821 the Bank resumed cash payments in gold at the usual statutory price of £3 17s. 10½d. per oz. A crisis in 1825 caused by speculation, proved the occasion for the Bank Act of 1826. This Act permitted the formation of Joint Stock Banks with the right to issue Notes of their own, provided however that they were instituted outside a radius of 65 miles from London. It was the starting point of Joint Stock Banking.

The real change began in 1833. The Charter of the Bank was due for renewal. A Committee of Inquiry had been appointed to make recommendations and their report resulted in the Bank Act of 1833. It was a landmark in the financial history of the realm. By this Act:

1. Bank of England Notes became legal tender for sums over £5.

2. Interest rates could be raised above 5%. This strengthened the hands of the Bank in regulating credit. (Hitherto the usury laws had prevented the raising of interest rates.)

3. The fees paid to the Bank for managing the public debt were reduced.

4. Joint Stock Banks were legalised within a 65 miles radius. This made possible the formation of the great London Joint Stock Banks, the "Big Five". In 1833 the London and Westminster Bank was founded, to be followed at intervals by the others.

At first the Bank of England resented the intrusion of these commercial banks. For example, the Bank of England refused to open an account for the London and Westminster Bank. It further refused to discount bills which were accepted payable at a Joint Stock Bank, although the names were first-class. Gradually the hostility waned and the Bank of England, already the Bank of the Government, became also the Bank of the Joint Stock Banks. But the greatest and central Act in the history of the Bank was Peel's Bank Charter Act of 1844. By this Act:

1. Note-Issue-Banking was divided from Deposit-Banking. In the future these two Departments of the Bank of England were to be separated.

2. The Issue Department was to have a backing of gold, silver and bullion for every Note issued. (Except the Fiduciary Issue of £14 millions of notes backed by securities, which was transferred to it.)

3. Any person had a right to demand gold from the bank in exchange for Notes, or Notes in exchange for gold at the rate of £3 17s. 9d. per oz.

4. The Bank was to publish a weekly statement of its accounts. This *Return* became the financial barometer for the realm.

As the Bank of the Government, the Bank of England receives all revenues as they are paid. They become Deposits in the Bank of England, which can use them as any other deposit. The bulk of this Fund is appropriated by annual votes of Parliament. These Appropriation Bills pay for the services of the State. But a portion of the Fund which is known as the Consolidated Fund Charges is not voted for by annual Appropriation Bills. This portion comprises regular payments, such as:

1. The Civil List, the personal provision of the King.
2. Annuities for members of the Royal Family.
3. Certain pensions.
4. The salaries of Judges, the Speaker, the Comptroller and Auditor General.
5. The Interest on the National Debt.

It may also happen that the Government finds itself in need of money—only temporarily it is true, for as soon as the taxes begin to come in, the Government's Account with the Bank of England fills up. In the interval the Government borrows from the Bank just as an ordinary customer would borrow from a Joint Stock Bank. A customer who has received goods on credit, draws up a Bill promising to pay that sum in three months' time. The seller of the goods takes this Bill to his bank which discounts it. In a similar way the Treasury draws up Exchequer Bills which the Bank of England discounts (for obvious reasons) at a very low charge. Such Treasury Bills make up the Floating Debt of the realm.

Now as the Joint Stock Banks developed, they too kept their

Accounts in the Bank of England. The Government's Bank became also the banker's Bank. It became the Central Bank of the realm. With increasing commercial expansion and improved banking technique, the Joint Stock Banks were able to create money far in excess of the money deposited with them. They were able to create such credit money in five ways by:

1. *Granting Loans.*

When a customer deposits money in his bank and then draws cheques on his credit balance, one of two things may happen to the cheques so drawn.

(a) They may be paid to the credit of another account with the same bank. In such a case no alteration in the liability of the bank takes place. All that happens is a change in the ownership of the money, from that of the drawer of the cheque to that of the payee.

(b) If the payee happens to be a customer with a credit balance at another bank, the reduction in the account with the first bank will be offset by an increase in that of the other bank. And in both cases no change will take place in the volume of the nation's money.

But if a customer borrows from the bank, his cheque is as much honoured as if he had deposited money. The granting of the loan therefore creates money; bank money. And such loans to customers are recorded in the bank's balance sheet as an *Asset*. The repayment of the loan of course extinguishes this bank money.

2. *Discounting Bills.*

In a similar way the Bank creates money by Discounting Bills. There is no real difference between granting a loan and discounting a bill. In one case the bank collects the interest (discount) at the beginning. In the case of a loan the Bank

collects its interest as the loan is repaid. There are differences but they are small. When discounting a bill, the Bank will collect repayment from a third person and not from the customer. And on the Bank's balance sheet, the assets will be recorded as *Bills Discounted* not *Loans to Customers*. However when a bank discounts a bill, it adds more money to the volume already in circulation.

3. *Loans to the Money Market.*

The Bank obviously adds to the money media when it lends its funds to the Money Market. In the bank's balance sheet it will figure as Money at Call and Short Notice.

4. *Buying Government Securities.*

The Bank can further create money by investing in Government Securities. For example, if the Bank buys securities from one of its own customers, his account is credited for that amount. Against the new Asset, *Investment Account*, the Bank's liability is increased on current account. For there is no real difference between buying investments and in lending the money to the customer to enable him to buy the very same investments. The Bank would prefer to lend him the money, for then he would have to pay interest. It would also prefer it because the customer would bear the risk of either a rise or fall in its market value. Banks prefer not to bear such risks.

5. *Buying new premises.*

Lastly (and strangely), the Bank creates more money when it buys new premises or renovates old ones. For the builders or decorators will be paid by cheques, which they will add to their accounts in the bank.

The core of banking then is that every loan creates a deposit. But it has been seen that the banks cannot go on granting loans indefinitely. The amount of credit money they can create is limited by the amount of cash (gold and silver and bank

notes) and the bank's own balance at the Bank of England. If a bank finds that its balance at the Bank of England is falling low, it will slow down the making of loans and will call in loans already made to the Money Market. If on the other hand the balance is ample, it will try to utilise it in the most profitable way and if nothing else offers will buy securities. As all the banks keep their reserves in the Bank of England it is clear that on that volume of money, a general volume of bank credit can be created. Generally the proportion is 10%, so that the banks can create ten times as much money as the amount of their balances in the Bank of England and the coins and notes held by them.

But the Bank of England, too, acts as an ordinary bank and creates credit. The sole difference is that its creations are shown only on the balances of the other banks. The means by which the Bank of England creates credit money are:

1. *Ways and Means Advances.*

When the Government borrows from the Bank of England, it is known as Borrowing by Ways and Means. In such a case the process is similar to that by which a customer borrows from an ordinary bank. Here the customer is the Government. If the Government, for example, borrows £1 million, then the Bank would show an increase in Government Securities by £1 million on one side, and in Public Deposits on the other side by the same amount. The Government, of course, would use the loan to pay its officials, its Civil Servants, its M.P.s, its Admirals and Generals, and its Contractors who supply the services. These would pay their cheques in to their banking accounts throughout the country. These banks would then present the cheques to the Bank of England. And as a result on the Bank's Balance Sheet the item *Public Deposits* is reduced and *Other Deposits, Bankers'*, is increased. On the other hand when taxes are paid, the Inland Revenue pays the cheques to the Bank of England, and the item *Public Deposits* is increased.

When the Ways and Means loan is repaid by a transfer from Public Deposits, the credit is then cancelled.

2. *Discounting Bills and Government Loans.*

The process is similar when:

(a) The Bank discounts Treasury Bills for the Government, or

(b) Purchases a new issue of Government Loan.

For in fact the Government is borrowing money from the Bank of England. And it has been seen that when the Government borrows, the Bank balances of the other banks are increased.

3. *Loans to the Money Market.*

Similarly if the Bank of England granted a loan to a Discount House which had been compelled to go to the Bank of England ("driven to the Bank" is the phrase), because a loan had been called in by a London Bank; the Bank's balance sheet would show an increase in its *Other Securities* by the amount borrowed and that amount would be credited to the calling-in bank. This of course increases the item *Other Deposits—Bankers*. When conditions become easier, the Discount House will borrow from its bank and repay the loan to the Bank of England. On the balance sheet this will be shown as a reduction both on *Other Deposits, Bankers* and *Other Securities*.

4. *The Purchase of Gold.*

This in one sense is a truism, for credit based on actual gold is the safest of all credit. Yet its mechanism is interesting. If the Bank bought gold from California or Klondyke or South Africa it would probably buy it through a bullion dealer. He would take the cheque that he had received and pay it in to his bank. That bank would place it to its account in the Bank of England. The Bank of England would credit that amount

on its books, to that Joint Stock Bank. It would charge the cheque to the account of *Notes Held* in the Banking Department. The gold will of course have been handed to the Issue Department. That department will issue Notes in exchange for the gold, of an equivalent amount, to the Banking Department.

5. *Open Market Transactions.*

This method expands or contracts the volume of money according to the needs of the nation and the policy of the Bank of England. It is part of the policy of managed money. If the Bank decided that because of the increase in the amount of goods and services, an increase of money is needed, then the Bank will purchase Government securities on the Stock Exchange, that is in the Open Market. The sellers of these stocks will pay the cheques they receive in payment, to their accounts in their own banks. They in their turn receive credit from the Bank of England. And on the Bank's balance sheet the increase of money is indicated by the increase of *Government Securities* on the one side and of *Other Deposits* on the other.

The reverse is equally true. When the Bank of England decides that the general volume of money in circulation is too great, it sells Government securities on the open market. The cheques drawn on the London banks which are received by the buyers of the securities, will result in the items *Other Deposits, Banks* and *Government Securities* on the Bank's balance sheet being diminished.

The Bank of England therefore holds the key of the monetary policy of the nation. It is able to control the volume of money through its power to increase or decrease the amount of money standing to the accounts of the Joint Stock Banks, for they bank with the Bank of England. When our banking system was based on the Gold Standard, the amount of money it could so create was limited by the Bank Charter Act of

1844 to the amount of gold it held. A lack of gold, and as a consequence a lack of Notes held by the Banking Department as its reserve, prevented any creation of money. When the *Proportion* (of gold to credit), fell below the figure thought necessary for safety—about 40% in the case of the Bank of England—creation of money ceased. Unless gold holdings increased, the volume of money remained static. But ever since the passing of the Bank Charter Act of 1844 there were critics. It was criticised on the grounds that:

1. It tied the hands of the Bank too rigidly.
2. If the production of goods outran the volume of money, a slump was produced, and the remedy was not to cut down expenditure and throw more out of work, but to increase "purchasing power" in the hands of the consumers, by adding to the volume of money. This the Bank could not do because of the limitations of the Act of 1844. Winston Churchill pointed out the unwisdom of allowing the economic progress of Man to depend on the fortuitous discovery of gold.
3. It was further pointed out that the regular cycle of crises (1847, 1857, 1865, 1890) might have been due to the rigidity of this limitation, and that in each crisis very significantly, the Bank Act was suspended. (Only in 1857 was it implemented.) Prof. Pierson commented: "What a curious law which can only remain on the Statute Book because the Government allows it to remain inoperative at the most critical moments."

In 1914 War broke out and as part of our national defence measures the Bank Act was again suspended. The Bank was relieved of its obligations to pay gold. It was authorised to increase the Fiduciary Issue. The function of issuing Notes was granted to the Treasury ("Bradburys"). But in 1925 we returned to the Gold Standard. It appeared that history was repeating itself. We had gone off gold in 1797 and resumed it in 1823. We had gone off gold in 1914 and resumed it in 1925. Now

however there were other factors. The international situation was far more complex. It was complicated by reparations and inter-allied war debts. And the return to the Gold Standard produced such economic difficulties that in 1928, by the Currency and Banking Act, the Fiduciary Issue was raised—and moreover by this Act the profits that would result from this additional power to create credits were to go to the Treasury. Then there came the great Economic Blizzard 1929–31, to add its problems to the monetary dislocation. In 1932 by the Currency Devaluation Act, the £1 Sterling was devalued. The £1 Sterling was no longer tied to gold. It was no longer worth its weight in gold. The £1 Sterling is worth now what it will buy.

Then in 1939 came the second World War. By the Currency Defence Act 1939:

1. The normal working of the Exchange Equalisation Fund was suspended.
2. Its funds were to be used for war purposes.
3. The 1928 Act was amended so that the gold in the Issue Department of the Bank of England was transferred to the E.E.F. now to be used for the war.
4. The Fiduciary Issue was raised to £500 millions.

During the war, the demand for the Nationalisation of this citadel of the nation's monetary castle assumed practical significance. Those who opposed Nationalisation argued:

1. That Nationalisation was an untried theory.
2. That it had lost its urgency, because by law the monetary situation was sufficiently flexible to enable the Government to control the Bank and its money-creating powers. If more money is legitimately required, then the Fiduciary Issue can be increased. If there is danger of inflation, it can be reduced.
3. That the Act of 1928 had already transferred to the Treasury the profits made possible by an increase in credit money.

Those who wished for Nationalisation claimed that what in fact had grown up in practice should now be regularised by Statute; that the national character of the Bank should be legally recognised; that law should regulate and control the amount of money, in the realm.

In 1945 the Bank of England was nationalised. The existing Stock was transferred to the Treasury and the holders were compensated by Government Stock bearing 3% interest. The Governor and Directors were replaced by a Governor, Deputy Governor and Directors, appointed by His Majesty. The Chancellor of the Exchequer expressed the view that the Bank's function of managing the currency of the realm should be directed, so as to secure that the purchasing power in the hands of the consumer should be adequate to purchase the goods and services which the community, when in full employment, can supply. By law the Bank of England has been transformed into the Bank for England. The Crown has re-established its ancient and historic right of being the sole source of the medium of exchange in the realm.

Here are three Returns from the "Old Lady of Thread-needle Street" at intervals of fifty years. These apparently dull figures tell a fascinating story to those who can read them of the wealth, and as far as wealth can show it, of the prosperity of Britain:

1. The Bank Return of 7th September, 1844.

This is the first Balance Sheet of the Bank after Peel's Act came into force.

ISSUE DEPARTMENT

Notes issued:	£28,351,295	Govt. debt ..	£11,015,100
		Other securities	2,984,900
		Gold coin and	
		bullion ..	12,657,208
		Silver bullion..	1,694,087
	<hr/>		<hr/>
	£28,351,295		£28,351,295

BANKING DEPARTMENT

Proprietors' capital ..	£14,553,000	Govt. securities	£14,554,834
Rest	3,564,729	Other securities	7,835,616
Public deposits	3,630,809	Notes	8,175,025
Other deposits	8,644,348	Gold and silver coin	857,765
Seven - day and other bills ..	1,030,354		
	<hr/>		<hr/>
	£31,423,240		£31,423,240

2. Bank Return of 24th December, 1894 (figures to nearest £1,000).

ISSUE DEPARTMENT

Notes issued ..	£58,367,000	Govt. debt ..	£11,015,000
		Other securities	5,785,000
			<hr/>
		Fiduciary issue	16,800,000
			<hr/>
		Gold coin and bullion ..	41,567,000
	<hr/>		<hr/>
	£58,367,000		£58,367,000

BANKING DEPARTMENT

Proprietors' capital ..	£14,553,000	Govt. securities	£14,936,000
Rest	3,090,000	Other securities	26,616,000
Public deposits	9,451,000	Notes	32,093,000
Other deposits	48,498,000	Gold and silver coin	2,065,000
Seven - day and other bills ..	118,000		
	<hr/>		<hr/>
	£75,710,000		£75,710,000

Note: The heading "Notes Issued" includes those issued to the Banking Department, so that the amount in circulation

is only £26,274,000. This distinction is shown in the more modern return below.

3. Bank Return of 1st November, 1945.

ISSUE DEPARTMENT

Notes issued:	Govt. debt ..	£11,015,100
In circulation £1,322,190,895	Other Govt.	
In banking	securities..	1,338,397,919
department ..	Other securi-	
28,056,938	ties ..	576,624
	Silver coin ..	10,357
		<hr/>
	Fiduciary	
	issue ..	1,350,000,000
	Gold coin and	
	bullion (at	
	172s. 3d.	
	the fine oz.)	247,833
		<hr/>
<hr/>		£1,350,247,833
£1,350,247,833		

BANKING DEPARTMENT

Proprietors'	Govt. securities	£266,874,838
capital.. ..	Other securities:	
Rest	Discounts and	
Public deposits	advances ..	11,180,764
9,160,604	Securities ..	22,028,650
Other deposits:	Notes ..	28,056,938
Bankers ..	Gold and silver	
244,234,858	coin	402,732
Other accounts		<hr/>
57,439,217		£328,543,922
		<hr/>
<hr/>		£328,543,922
£328,543,922		

Note. Surprise may be expressed at the small amount of "bullion" shown in the "Return".

It must be remembered that the bulk of the gold holdings in the Issue Department are now paid into the "Exchange Equalisation Account". The actual state of this account is necessarily confidential.

CHAPTER XXIV

THE PROBLEM OF FULL EMPLOYMENT

THE problem of the nation's employment is essentially a modern one, not because want and unemployment did not exist earlier but because:

1. Economic experience has indicated that there has been a regular rhythm of slump and boom, of employment and unemployment for the last 150 years.

2. The experience of the last two wars has further indicated that somehow wars "cure" unemployment. Constructive thinkers have tried to indicate how factors which in war, "cure" unemployment, can be included in an economy of peace.

3. In the nineteenth century it was not regarded as being within the province of the State to enter into this economic field. It was considered right for the State, by Poor Laws, to prevent actual death when unemployment came, but in an age of *laissez-faire*, the function of the State was severely limited to justice and defence. To-day the functions of the State have widened. It is claimed that just as it is the duty of the State to prevent attack from external foes and violence within, so also it has a positive function of preventing the mass unemployment, that was our experience especially in the period of the Economic Blizzard 1929-31.

Ultimately unemployment is more than a purely economic problem; it has ethical and political implications. For the nation is a partnership in prosperity and adversity. The spectacle of unmerited suffering that unemployment entails, makes a mockery of our industrial civilisation. And the fear of unemployment has proved as demoralising as unemployment itself. Because of that fear, men have opposed technical im-

provements, Luddites smashed machinery, men prevented the intrusion of women and nationals the entry of foreigners; for they all feared that the amount of work was fixed and that in the scramble they would be shut out. Useless work has been created to keep the unemployed occupied; holes dug and filled in and all the while the amount of useful work to be done was unlimited. Politically, the fear of unemployment makes a community unstable. Unemployment with an income corrupts; without an income, it creates hostilities that endanger social peace.

However, it is to Economics that the problem is most germane. For the results of unemployment affect economic society in many ways:

1. It wastes the productive effort of the community. For the resources of the realm are not employed to the best advantage if labour remains idle. While our needs remain unmet, it is "bad housekeeping" to allow one factor of production to remain unused.

2. The economic waste of one factor of production becomes more glaring when, because of the very unemployment, commodities are deliberately wasted. Coffee has been thrown into the sea, cotton ploughed back, wheat used to drive engines, milk given to pigs, rubber burnt, because unemployed men could not make an effective demand for these very goods that they needed. This paradox of hunger amidst plenty, of mass unemployment amidst unfulfilled wants, of the waste of an essential and a most perishable factor of production (labour), when society needs labour and labourers demand but to work, is a challenge to economic theories.

Idealists have envisaged a society with the discipline of hunger removed. It is argued that just as Greek culture flowered on the labour of the helots, Roman law on the latifundia, knightly chivalry on the labour-rent of the serf, and the wealthy ease of the factory magnates on the "wage

slavery" of the factory hand, so to-day is the machine capable of removing the toil and drudgery from life. It should enable all Mankind to enjoy the leisure that makes possible the good life. For there is no virtue in labour itself. Labour is only a means to the good life. It is not an end in itself. That however is a philosopher's picture of the future. It is sufficiently remote to supply no solution to a pressing problem.

Work is not aimless self-fatigue. Employment connotes doing work for which the worker is paid, to do which he has to use native or acquired skill, and which results in the creation of utilities. Of course some people will do work without payment. They will work out of a sense of public duty, or to gain the esteem of their fellows, or to fulfil some personal pleasure, or even to be healthily occupied. Such work too has economic implications, but in order to earn a living the worker has to receive some payment. Workers then include all those who earn their living by their effort and skill and ability, ranging from the unskilled casual labourer to those gifted with the rarest skills.

The modern state has devised a system of insurance against sickness, accidents, old age and unemployment. But it is an insurance against and not a cure for these risks of life. Insurance against unemployment will not abolish unemployment. It will alleviate the distress consequent on unemployment.

Unemployment has been divided into two main groups:

A. The first is Structural Unemployment. This is caused by any industrial change, by what has been called industrial and commercial "progress". When new kinds of goods are produced that displace older goods, then those employed in making the previous goods are dismissed and become unemployed. So that whenever demand changes because of a change of taste or fashion, it will affect adversely the established industries. When the railway came, those employed in the

previous road transport industries suffered. The gas industry displaced the candle industry. The artificial silk industry is affecting the older textile industries. So that it can be said that Structural Unemployment will occur whenever too large a labour force remains attached to an industry (which may be dying) or an area (which is decaying).

It has already been seen that frictions prevent the necessary mobility of labour to meet changing demand. These frictions prevent those who are redundant in an industry or in an area, from going to those industries or areas where labour may be needed. Such frictions may be:

1. Ignorance: There may be employers in one area seeking workers and workers in another area seeking work. Yet one does not know of the other.

2. Incapacity: One of the evils of specialisation is that men have been unable to work to new processes. Technical improvements are essential to healthy and dynamic economic life, yet they may be held up by lack of workers to work to them, and workers may suffer through inability to work to them.

3. Legal: When law prevents the free flow of labour. Indeed one of the consequences of unemployment is that both the State and organised Labour fear that their standards of living may be jeopardised by the free entry of labourers. So that the State passes aliens' laws and places a quota system on the entry of foreigners, whilst Trade Unions place restrictions of training and apprenticeship and high membership fees on new entrants.

4. Human: Men, who have been long in one craft or in one area, find it too difficult to move to other industries or to other areas. They may be too old. They do not wish to lose their life friendships or their known moorings, for the unknown. They may have local church and educational attachments. In a period of housing shortage they may not wish to

leave a home, when there is no other available. It has already been seen that new industries recruit their labour from the young and those who are more mobile.

5. Lastly, it may be just human inertia, that keeps people in one area and even to one industry although they are unemployed. They may be too listless to move. Unemployment undermines character and after a long spell, men doubt that there ever will be work for them again.

In the twentieth century the State has modified the frictions that increase unemployment by such means as:

1. Labour Exchanges were instituted in 1909 and have attempted the organised mobility of labour. They prevent the aimless search of men by employers and of work by men. For it has been seen that the labourer suffers from having his commodity, labour, inextricably attached to him. It is the most perishable of all commodities. Once it has not been consumed, it is lost. It is a most essential of commodities. Not a machine will move without labour. It is therefore important from the point of view both of industry and the labourer that this commodity should be used to the best advantage. Part of the very human problem of casual labour is that through lack of knowledge or organisation, certain areas or certain industries have retained an excessive reserve of perpetually under-employed labour.

2. Controlled Location of Industry. As areas become specialised, it has meant that when the demand for the commodity produced by that area declines, then the whole region becomes a distressed or derelict area. As the inhabitants have become specialised to the work which the locality offered, they suffer in the change. The State has therefore recognised the human obstacle to mobility of labour, by planning the balanced distribution of industry and labour.

To meet the unemployment caused by technical changes, changes of fashion and the growth of foreign competition, the

Government proposes that industries should be "sited", and "planned" in order:

1. To mix employment. That is, to see that an area is not over specialised.

2. To control the location of industries, so as to prevent unsuitable siting.

3. To transform the depressed and derelict areas into Development Areas. Such areas are to be helped by priorities in building, government orders and loan facilities. For such areas have a store of fixed "social capital", churches, schools town halls, public buildings, parks, which it would be unwise to allow to go derelict.

4. Provision is also being made for training and re-training for those whose crafts and skill have no further market, because of such structural changes in industry.

Organised mobility of Labour, and Planning the Location of Industry, are both replacing and aiding the free market and the interplay of economic forces.

B. The second and graver problem is that of General Unemployment. In the period 1929-31, which became known as the Economic Blizzard, it reached the disturbing figure of 14% of those insured against unemployment. In such a period unemployment is not confined to one locality or to one industry but is spread over all localities and all industries. The two kinds of unemployment are of course intertwined, but it is this mass unemployment that needs more immediate prevention.

Economists agree on what is a truism, that a cause of general unemployment is a decline in total monetary expenditure. It cannot be due to shortage of work, because human needs are far indeed from being satisfied. But the effective demand for those needs is limited. Employment depends on spending. The more a person spends the more will someone be employed. There is an industrial chain beginning with the fina

consumer and ending with the primary producer. When a person spends, he gives work to retailers, who then give work to wholesalers, who in turn give work to manufacturers, who give work to the grower or miner of the raw materials. All the industries are employed to supply the want of the final customer; the distributive, the constructive, the extractive; the shippers and bankers and insurance houses. All depend on the effective demand of the final consumer.

If the consumer fails to spend, then the whole chain of production right back to the extractive industries, ceases. Spending makes work. (Of course wise spending makes wise work.) As the amount of spending rises so the number of people employed rises, as spending falls so employment falls. If spending is regular then employment is regular, if spending is erratic then employment will fluctuate. But, in order to be able to spend, the consumer must have work. Employment gives the consumer the wherewithal to spend, and when he spends he creates employment. Employment creates employment.

The total spending within a realm can be divided into three main sources:

1. Private or Individual.
2. Public or semi-public.
3. Foreign or for the Export Trade.

A. When private people spend, they can buy either:

1. Consumption Goods, that is goods that on the whole satisfy immediate needs; books and bread, concerts and clothes, milk and medicine.

or 2. Production Goods, such as machinery and ships, factories and foundries, that is goods that will one day produce more goods. They do not buy these Production Goods for personal consumption. They buy them, because they hope that one day they will produce more consumption goods. And

they buy these Production Goods indirectly and co-operatively by investing their money in companies that produce these goods. (Buying Shares on the Stock Exchange is not investing. It merely transfers money and claims from one person to another.) They hope of course that their investments will prove successful, that they will receive good dividends, with which they will again buy either Consumption Goods or Production Goods. Because Production Goods take time to make, they are also known as Future Goods. Because Consumption Goods are consumed within a relatively short time they are called Present Goods. Of course there are border difficulties. A house for one's personal use might be classified as Consumption or Present Goods but a house in which goods are to be made, might be Production Goods or Future Goods. And, of course, a house as consumption goods is more *durable* than e.g. a hat.

Because, however, when a person buys Future or Production Goods, it means that he has to wait for a return on his money, this form of Spending is called Saving. But from the economic point of view Spending and Saving are both *outlay*. They both contribute to the total monetary expenditure.

B. The total monetary expenditure will also include buying by the Government, for it buys the services of its employees both civil and military. It pays them a wage varying in range from a private's to a Field-Marshal's, and from a government typist's to that of the Head of a government department. The government has also invested money in such companies as the Suez Canal and the Anglo-Iranian Oil Company.

In addition to the Government, there is a growing body of public and semi-public spending authorities, adding their spending to the total expenditure. Such public spending authorities are the Local Governmental Authorities. They too have a large Local Government Civil Service. They too buy Consumption Goods, such as meals for school children; and

Durable Consumption Goods such as Swimming Baths and Libraries. They also borrow in order to buy Production Goods. Semi-Public Corporations like the B.B.C., Dock and Harbour Boards, the Electricity Board also buy both Consumption and Production Goods. They add their outlay to the total outlay of the community.

C. Lastly, when we export our goods, they are bought by foreign persons or companies, who add their spending here to the total monetary outlay that will determine the range of Employment of our people.

The experience of the last 150 years has been that unemployment comes in cycles which suggests that the action of the Government should be directed in an anti-cyclical direction.

It has been seen that unemployment creates unemployment. When unemployment begins to start this cycle, it does so generally in a constructive industry. Shipyards are idle long before bakers' shops, foundries work short time long before tailors. And the reason is that the demand for consumption goods is relatively stable as compared with the demand for production goods. Investment that finances the production of Capital Goods however is on the whole unstable. It had been supposed that in times of boom, the bank rate would be raised and in times of slump it would be lowered, in order to stimulate investments. But it has been shown that in times of doubt, investors will not borrow even at low rates, so that the effect of a lowered Bank Rate as a stimulus to investment becomes doubtful. Before there is an actual economic depression that throws people out of work, there is a psychological depression that checks the flow of investments. This psychological depression makes this kind of spending erratic and incalculable. It is also erratic and difficult to forecast because Construction Goods are generally so durable. If a mistake is made, it is generally difficult to remedy it quickly. If a Bradford firm

makes a cloth that does not take, it will speedily weave a new one, but if machines are made that are faulty, it is not so easy to scrap them. The loss is far greater.

Lastly, firms generally build up reserves from which to renew their equipment. It is an annual cost to the company. Now if this psychological depression sets in and they do not renew depreciation, then it puts the industries that cater for such needs entirely out of work. For example, a firm making motor-car bodies had been in the habit of renewing 10% of its equipment every year, but because of doubt it now decided to renew only 5%; this small reduction, if made by each firm, would mean a 50% reduction in the demand for such renewals. Production it has been seen is always ahead of demand and in anticipation of a demand. So that miscalculations are clearly more possible in the construction industries.

Unemployment once begun, spreads. Men will be put on short time, some will be dismissed. These will spend less on consumption goods. Shopkeepers will buy less from the wholesalers and so the chain of unemployment will encircle industry. It has therefore been suggested, that the Government should now act in an anti-cyclical direction. For it has been pointed out, that the action so far of the Government has been to deepen the slump. When a slump begins the cry is raised for Governmental economy. They cut salaries, they slow down or cease public works, they add to the volume of unemployment, by withdrawing money from the total monetary expenditure. It has been therefore suggested that they should reverse this process, by:

1. A Policy of Public Works; that is, by beginning to do publicly what private investment will not; by building new roads and bridges, by land reclamation, by checking coast erosion, all of which will make employment (give spending to workers) and help to maintain the volume of outlay necessary for employment. It has however been contended that, unless

there is careful planning beforehand, this cannot be put into operation when needed. For example, it has been pointed out that when President Roosevelt inaugurated such a policy of public works to cure the unemployment problem in the U. S.A., it failed. The sum spent, in proportion to the total outlay needed for full employment, was a fraction. Moreover such a policy takes time and what is needed is immediate work to maintain outlay. To meet these criticisms, it has been suggested that the Government and the Local Authorities should draw up a programme of public works that could be put into operation immediately. The public works programme would help to maintain employment when private investment failed.

2. The Government could also help by not reducing its wage bill, by not adopting an economy campaign, by not cutting down its works programme. It would have to face the unorthodox fact that *for that year*, the Budget would remain unbalanced. Budgetary Reform is part of the wider plan to secure and maintain full employment.

3. The Government might also vary Income Tax, especially now that it has introduced P.A.Y.E., increasing it in good times and lowering it in bad. This would make the demand for consumption goods more stable.

4. This principle could be further applied to premiums for Social Insurance. When there were symptoms of a contraction of total spending because of unemployment, premiums could be lowered for the employees and so the private expenditure on Consumption Goods would not decline too sharply. Consumption would remain relatively stable.

Anti-cyclic measures however are considered by economists, who wish to be more thorough, as a palliative. They wish to plan for "full employment for all," to maintain the total monetary outlay so as to produce full employment for all. It is recognised that in a dynamic society, there will exist certain frictional influences that will make for unemployment: seasonal slackness and changes; men changing their jobs; foreign de-

mand will fluctuate. This unemployment it is hoped, will be of short duration and the ensuing hardship will be alleviated by the Unemployment Insurance Fund. But in the worst year between the wars in 1932 there were 2,800,000 persons unemployed, and many had been so for years. It is argued that if planning of man-power was possible during the war, it is also possible in peace. Both in war and in peace, it is recognised that employment depends on outlay. The main measure is therefore to secure adequate outlay by all the consumers of the realm, in order to evoke full employment. Consequently, it is claimed that the Government with a Planned Economy should see that the total outlay should equal the total productive capacity of the nation. For full employment therefore, a new kind of Budget is envisaged. So far, the Chancellor of the Exchequer has issued a financial Budget. He has dealt with the *finances* of Britain, and the influence of the Treasury has been to make it a budget of financial incomings and financial outgoings. The new Budget introduced by a Minister of National Finance, with wider range of responsibility and advised by a kind of Economic General Staff, should be more comprehensive. Its data would not be merely financial but would contain estimates of man-power, productive capacity, national resources, and equipment. It would be the duty of the Minister of Finance to see that the total outlay equalled the productive capacity of the people. He would estimate what outlay he could expect from private consumption and private investments. For the first condition of full employment is that total outlay should be high enough to set up such a demand for the products of industry, that it could not be satisfied without using the entire man-power of the realm. He would also have to estimate what would be the governmental and semi-governmental expenditure, and of course the demand by foreign countries for our goods and services.

He would seek to increase total outlay, by encouraging:

1. Private consumption.
2. Private investment.
3. Undertaking additional public spending.
4. Developing exports, that is the spending by foreign peoples or governments, in buying goods made here and so giving work to our people and balancing our payments abroad.

He could encourage private consumption:

1. By such schemes as a comprehensive social insurance, so that when earnings fall off, consumption should not do so at same rate. This might "banish want" from our society.
2. By bulk purchase of supplies and their distribution at controlled prices, or even at a price which might be lowered by a subsidy. This would give regular employment to producers.
3. By a comprehensive Housing Plan, that would give regular work, and so regular outlay, to a vast army of people. Such a scheme would be a "public investment."
4. By a National Health Service, which would prevent the falling-off, of spending during sickness.
5. If necessary, by a "free" distribution of goods, to maintain regular production of such goods; milk and meals for example to school children. To those critics who fear waste, it has been pointed out that even if there were waste, it is better to have such waste here, at this stage of "production," than waste of human effort by unemployment of producers; and better still than to have goods wasted, as wasted they were, by producers who threw away coffee and burnt wheat and misused milk.
6. The Minister of National Finance could also improve our National Equipment and so raise the nation's standard of living. He could do this steadily, and not by fits and starts, by instituting a National Investment Board to encourage investments.

He could Balance our Payments Abroad by:

1. Increasing our exports, or

2. Reducing our imports and replacing them by home products.

Our exports could be increased by increasing the efficiency of our producers, by improving their health and training and by improving the mechanical equipment of our industry. For in the interest of full employment, it would be unwise to leave imports and exports to the unregulated working of the previous market economy. And the need for balancing our payments abroad is an additional reason for planning outlay. Because we are less self-sufficient than any other industrial realm, the need for overseas trade is the more vital. Because a large demand for British goods (with its consequent effect on the volume of employment here), comes from overseas, a full employment policy should include measures to stabilise this overseas demand. This demand comes partly from producers of primary commodities. To stabilise the demand for the primary producers, there would be need to stabilise production and marketing of the primary products. This in turn implies:

(a) Long term collective contracts.

(b) That Britain should guarantee both a market and a price, in order to secure stability of supply and prosperity to the suppliers.

(c) And by such means, she would secure a stable market for the products of her own industries.

It is recognised that it is more difficult to stabilise demand from other industrial countries. It is suggested that it can be pursued indirectly by seeking to develop trade primarily with those countries which are themselves taking effective steps to secure full employment. For it is accepted that only by international trade, implying as it does the specialisation of people and areas to produce those commodities and services for which they are best fitted, can the standard of life be raised.

Planning for Full Employment may compel planning for many of its implications:

1. Obviously it will mean planning for "total outlay."
2. It has been seen that it will imply planning a new kind of Budget.
3. Planning and the control of the currency of the realm has already become a function of the Government, more especially since the Bank of England has been nationalised in 1945.
4. It would obviously be unwise for workers enjoying security, as a result of full employment, to exert pressure to secure wages that would destroy their gains. For higher costs of goods and services might more than counter-balance their wages and their regular work. There will therefore be a need for some planning of a National Wages Policy.
5. Obviously too there will be an urgent need for some plan for Price Control, to make both wages and security really effective.
6. Lastly, full employment and industrial security may undermine industrial discipline, as we know it. For so far, industrial discipline has had the final sanction of hunger. Obviously a new social sense will have to develop, a sense of the dignity of labour, of the joy of craftsmanship, of the value of industrial comradeship, to offset the hostility between Mastership and workmanship.

There are criticisms too of this plan for full employment:

1. It is argued that the final aim of economic life need not be merely full employment.
2. It would obviously entail a vast bureaucracy to administer the scheme.
3. And it is further argued that the financing of the Plan is weak. For the Government is to finance full employment by increased taxes and loans. But they may be difficult to procure in times when they are most in need.
4. Lastly, it is held that the Theory states that full employment can be secured by an adequate supply of "purchasing power". But money is not an "asset". It is a "claim" on goods

and services. What is really needed is greater output per Man Year (O.M.Y.) to enable this claim to be met.

Note. The "Plan" is discussed more fully in:

Full Employment in a Free Society, by Sir William Beveridge.

Full Employment, by Barbara Wootton.

Employment for all, by P.E.P.

It is only a "Plan". But the "Plan" is based on economic data and economic reasoning. It is a "Policy", which the Government may adopt or reject. The economist can only advise.

APPENDIX

I. THE PUBLIC AUTHORITY AND MONOPOLY

THE attitude of English public authorities to monopoly is not quite clear and the problem of monopoly control is further complicated by political considerations.

(a) *Politically*

(1) One body of political thought—the Socialistic—would like to see a great extension of control and ownership of monopolies by public authorities—(whether the State or Municipality). It is argued that

- (a) the fact that such a monopoly already exists, facilitates such control or ownership
- (b) the nation (or town or country) could then secure the profits which otherwise go to private individuals
- (c) because such an authority was publicly controlled—the price would not be “extortionate”, and the quality of goods high
- (d) public opinion would secure “efficiency” and prevent “jobbery”

(2) The opposing body of political opinion—the Individualistic—argue that

- (1) State or Municipal control of industry would lead to “*political*” control; that is appointments might be made on political considerations and not on that of individual efficiency
- (2) the control by a public body leads to a decline in personal initiative; for there is no personal incentive to success

- (3) It creates a large body of public employees—who may use their powers as citizens—the (the vote) to maintain high wage rates (or high *real* wages) for themselves, by voting for those promising such advantages. (It has even been suggested that public employees should be disenfranchised)
- (4) It leads to bureaucracy and dull routine

(b) *Economically*

Society we have seen relies on competition to secure its goods and services. It has already been seen why and how competition encourages the formation of Trusts and Combines. (Other factors such as Tariffs have also to be considered. For a tariff—by securing a monopoly of the home market—makes combination; a “working proposition” to those who would otherwise keep out of the Combine.)

In England, because the law refuses to sanction “contracts in restraint of trade” Cartels are not formed; but Trusts and Combines.

These Monopolies may be either

- (1) Vertical
- or (2) Horizontal
- or better still
- (1) Artificial monopolies
- or (2) Technical monopolies (or Public Utilities)

Now in the case of Artificial Monopolies the State does not intervene. It relies on

- (1) Competition—which will appear as soon as profits are sufficiently tempting
 - (2) the possibility of Substitutes
- to safeguard the consumer.

But in the case of Technical Monopolies, it has been seen that competition is impracticable and wasteful. In such cases, public authorities do intervene.

Such intervention is (1) made possible—by the necessary demands of the company to infringe on private property (a railway or tramway service, or a gas or water company, need these powers): In asking such powers from the State, the State can impose conditions; (2) is facilitated, by the nature of the industry: because

- (1) the Market is secure
- (2) competition is self-destructive
- (3) The industry lends itself to routine management

This control, by a public authority, may take four possible forms:

- (a) the control of Profits
- (b) the control of Price
- (c) allowing the Company to “run” the industry for a stated period of years, after which it is handed to the State or Municipality. That is leaving the industry to a private enterprise
- (d) complete ownership.

(a) If it is attempted to control the Profits of the company—to prevent “squeezing” the consumer—then it is argued that

- (1) such an attempt may penalise “efficiency,” for why struggle to make high profits by better methods—if they are to be taken away (beyond a certain figure) by the State—or if they are to go to the consumer in reduced charges?
- (2) profits depend on efficiency: but also on the capital of the Company. It has been seen how companies can “water” their capital

(b) If it is attempted to control the Price of a unit of goods or services: then it is argued that

- (1) the government’s fixed price—which of course will be the maximum charged price—will rarely be

lowered and so will offer little protection to the consumer.

(2) at the government's fixed price the *quality* of goods may suffer

(3) price-fixing is so important a part of business that it almost implies full ownership.

(c) If the authority leaves the industry to a Private Company, then

(1) the company is not zealous of great improvements, since the industry must ultimately be handed back

(2) they will secure the greatest advantage from their temporary control.

(d) So that: because of these difficulties some States and Municipalities have taken over—control and own—such technical monopolies. Such ownership may be

(1) Direct—as in the case of the Post Office

(2) Indirect—as in the case of the B.B.C.

The discussion then reverts back to "politics." (Many of these arguments have been taken from the chapter on Monopoly in Marshall and Clay.)

II. DIAGRAMS TO ILLUSTRATE THE RELATION BETWEEN SUPPLY AND DEMAND AND PRICE

(1) Let us imagine the case of motor-cars. Then: if manufacturers found that at the price of

£100 each they could supply 15,000 cars

£200 " " 20,000 "

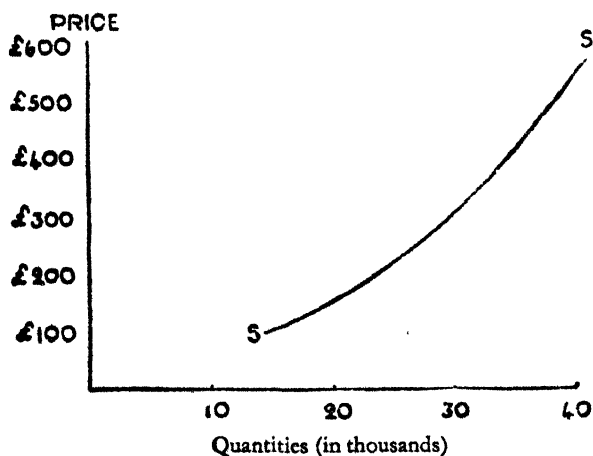
£300 " " 25,000 "

£400 " " 30,000 "

£500 " " 35,000 "

£600 " " 40,000 "

it could be represented on a graph as

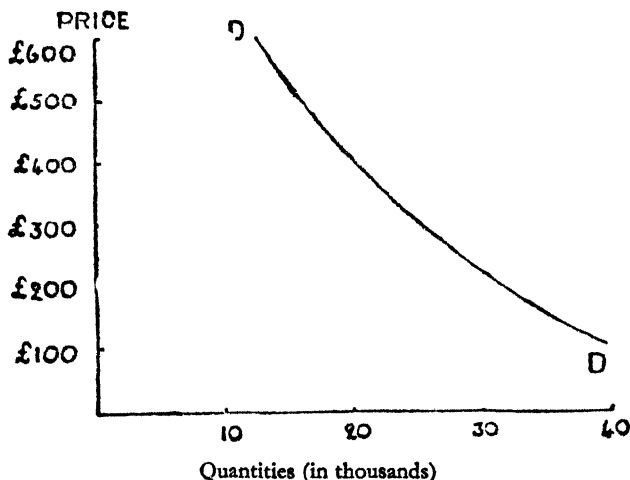


Then SS would be the Supply Curve; that is at the higher the price, more cars would be produced.

(2) Again let us now imagine that at the price of £100; then 40,000 cars would be bought

£200	"	35,000	"	"
£300	"	30,000	"	"
£400	"	25,000	"	"
£500	"	20,000	"	"
£600	"	15,000	"	"

This would be represented graphically as



Then DD would represent the Demand Curve—the lower the price of each car, the more cars would there be bought.

Now if the two graphs are combined, the result indicates:

While the Demand is for 40,000 cars; the price is £100—
while the supply is only 15,000 cars

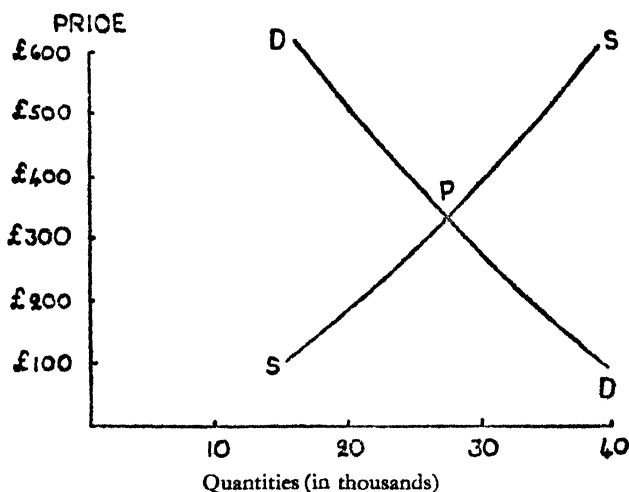
While the Demand is for 30,000 cars; the price is £300—
while the supply at that price is 25,000 cars

While the Demand is for 20,000 cars; the price is £500—
while the supply at that price is 35,000 cars.

(3) It is now easy to see what would be the Market Price of a Car.

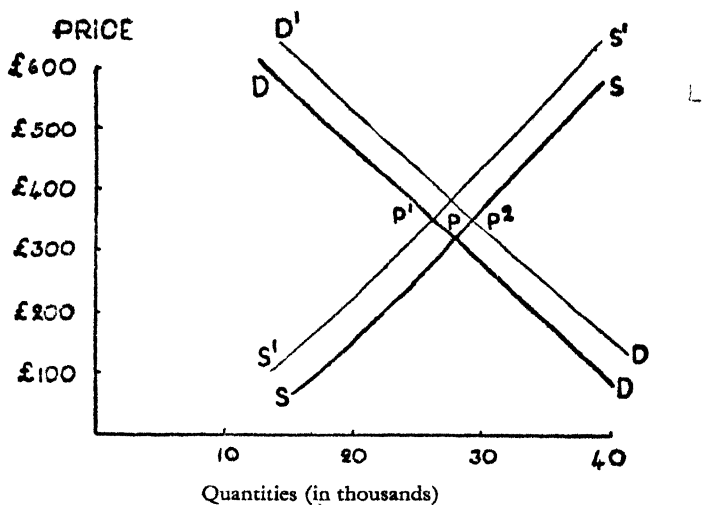
- (a) It cannot be £100, for at that price there are 40,000 demanded but only 15,000 supplied. Then competition among the buyers will force prices up.
- (b) It cannot be £500, for at that price there are 20,000 demanded and 35,000 supplied. Competition among sellers will force the prices down.

The price will be at that level when demand balances supply, *i.e.*, £350. At that price 25,750 will be bought and sold.



As has been seen, at this figure, some buyers will be receiving a Consumer's Surplus: and some sellers a Producer's Surplus.

(4) Now if a tax were imposed on the production of motor-cars, the new Supply Curve would be above the old Supply Curve; so that the new Point P^1 , will indicate that prices will rise. Similarly if the Demand increased, so that larger amounts were bought at the old prices, then the new Demand Curve will be above the old demand curve.



Such a graph brings out—pictorially the distinction between

- (1) a change in the *conditions of demand or of supply*
- (2) a change in the *amount purchased or sold*, which may be the result of a change in price.

Similar graphs should be drawn to illustrate

- (1) Where the Supply of a commodity is produced under conditions of Increasing Returns and Diminishing Returns.
- (2) Where the Supply of a commodity is Elastic or Inelastic.
- (3) Where the Demand for a commodity is Elastic or Inelastic.
- (4) The “short run” and “long run” effects of changes in the volume of effective demand and of effective supply.

The simplest method is to suggest figures which embody such conditions and then plot the graph.

III. A SUGGESTION FOR THE STABILISATION OF PRICES

THE TABULAR STANDARD

The necessity of "good" money to economic society has already been seen.

The reasons for the general acceptance of "gold" as the best money material have also been seen.

Besides the general advantages of a "metallic" form of money, gold possesses the additional advantages of

- (1) having intrinsic worth of its own—as metal, as bullion,
- (2) being relatively stable in value. For the stock of gold already in existence is so large and the annual additions to the stock relatively so small.

Gold was therefore used to measure the value of goods over periods of time. But recent experience has shown that even gold is not constant in value—while commerce is based on the assumption that the purchasing power of money will remain unchanged.

For example; if A buys say coal from B, to the value of £100, and promises to pay him in six months' time; if during the interval the value of money changes then commerce becomes a gamble, and economic life exceedingly insecure.

In order to secure that the Standard of Value should not itself vary in value, a variety of schemes have been suggested. One such plan is called the Tabular Standard. This is really an extension of the use of Index Numbers.

For example; in our case of A buying coal from B to the value of £100. If at the date agreed upon for payment, £100 will buy more—that is if the value of gold has appreciated, then B will receive more than he expected and A will be the loser.

If, on the other hand, £100 will buy less—if the value of gold has depreciated—B will receive less and A will have gained.

The scheme therefore suggests that instead of payment being made in *units of coin*, it should be made in *units of purchasing power*.

For example; it could be arranged at some Central Office (and business men would have to agree to this arrangement) that the Unit of Purchasing Power be the amount of money that could buy 1 cwt. of coal, 1 cwt. of iron, 1 lb. of cotton, 1 bush. of wheat, 1 cwt. of copper and 1 gal. of oil. Let us assume that the total price of these goods, in 1932, was £2.

Then if A bought from B goods to the value of £100; it could be expressed that the coal (or goods) cost or was exchanged for fifty units of Purchasing Power and when payment was made, then fifty units of purchasing power would be returned.

For example; if payment were made in 1934 and according to the Index, kept at the Central Office, the purchasing power of money had halved (that is that the total price of the goods taken for the Index Table had doubled) then A would pay for the coal, fifty units of purchasing power; which would then be not £100 but £200 (for it would take £200 to buy the same amount of goods in 1934, which it would have taken £100 in 1932).

If, however, the purchasing power of money had doubled (that is that the total price of the goods taken to form the Index Table had halved) then A would still pay fifty units of purchasing power. But because the purchasing power of money had halved, he would only need to pay £50, for £50 would buy in 1934 the same amount of goods that £100 had bought in 1932.

It is suggested that such a Standard would be of great benefit in all cases of contracts over long periods—whether purchases, annuities or pensions; although it might prove not

so advantageous in everyday commerce.

The main advantages claimed for such a Standard are

- (1) It would secure financial stability
- (2) It would discourage speculation; which is based on fluctuations in the price of commodities.
- (3) It would prevent bankruptcies, for they are caused by the calculations of merchants being upset
- (4) It would prevent the periodic collapse of credit—or mitigate its intensity—for prices would be more stable
- (5) These advantages would react favourably on social relations, *i.e.*, on unemployment.

IV. A CRITICISM OF THE RICARDIAN THEORY OF RENT

An American economist, Walker, has criticised the Ricardian Theory of Rent. His argument is as follows—that it would be untrue to say that the first settlers in a country occupy the most fertile sites, and that later settlers occupy less fertile areas. The reverse might be the case. For example; when the Pilgrim Fathers landed in North America, they hugged the seaboard lands, and only later when the Appalachian heights had been crossed, were the fertile Prairies reached.

There are two answers to this criticism:

- (1) The order of time in which land of differing fertility is occupied and cultivated, does not greatly affect the theory; for whilst variations in the fertility of land exist, so will those who own lands above the Margin of Cultivation, receive a Rent.

- (2) The Rent, in this case, in the case of the Pilgrim Fathers in North America, may have been a Rent of Accessibility or Situation and not a Rent of Fertility. For wherever there are variations in the quality of "land," whether as a result of Natural, or Social or Artificial causes, there Ricardian Rent will emerge.

V. MARSHALL, ON THE REPRESENTATIVE FIRM

The conception of a Representative Firm emerges on the application of the Ricardian Theory of Rent to Profits.

When applied to "Land", there is obviously Land on the Margin of Cultivation, which is cultivated because it pays at the price ruling for its product to cultivate it. *But it yields no rent.*

When the theory is applied to businesses, however, the Marginal Firm must make a profit. If it did not make a profit it would go out of existence. So that this firm is not quite Marginal in the sense that Land is. Prof. Marshall defines the Representative Firm as one "which has a fairly long life, and fair success, which is managed with normal ability, and which has normal access to the economics, external and internal, which belong to that aggregate volume of production." So that while a *profit* is made, the Representative Firm will continue to survive. From which it follows that prices will tend to adjust themselves to the cost of production of the Representative Firm and not of the abstract Marginal Firm.

But economic rents will, however, still emerge; for all businesses which can produce more goods than the representative firm will make higher profits—which are in the nature of economic rent. The successful businesses may have some natural or social or artificial advantages over the purely representative firm.

VI. THE CLEARING HOUSE RETURN

The following is a statement for the week ending Friday, September 30th, 1932, showing:

- (1) The Clearing House Return.
- (2) A comparison with a year ago (taken from *The Times*).

CLEARING HOUSE RETURN

Bills, cheques, etc., passing through the London Bankers' Clearing House during the week ended September 28th, amounted to £546,810,000. This compares with £527,427,000 for the preceding week and with £618,132,000 for the corresponding week a year ago. The aggregate for the year to date is £23,684,121,000, which is £5,392,691,000 less than the figure for the period to September 30th in 1931. The usual tables are given below:—

1932	Town	Metropolitan	Country Cheque	Total
Sept. 22	£106,525,000	£3,820,000	£6,747,000	£117,092,000
" 23	101,609,000	4,299,000	7,272,000	113,180,000
" 24	41,698,000	4,677,000	7,475,000	53,850,000
" 26	76,394,000	4,953,000	6,838,000	88,185,000
" 27	68,228,000	4,027,000	7,437,000	79,692,000
" 28	83,517,000	3,833,000	7,461,000	94,811,000
Week	£477,971,000	£25,609,000	£43,230,000	£546,810,000
1931	Town	Metropolitan	Country Cheque	Total
Sept. 24	£88,941,000	£4,330,000	£7,226,000	£100,497,000
" 25	90,962,000	4,136,000	7,330,000	102,428,000
" 26	56,752,000	4,226,000	6,955,000	67,933,000
" 28	107,838,000	5,429,000	6,770,000	120,037,000
" 29	77,830,000	4,683,000	7,868,000	90,381,000
" 30	124,154,000	4,144,000	8,558,000	136,856,000
Week	£546,477,000	£26,948,000	£44,707,000	£618,132,000

NOTES ON BOOKS FOR FURTHER READING

Economic literature is growing rapidly. The War and its consequences, the economic problem of reparations, the many inquiries into the causes of the "great economic depression", have resulted in a greater desire to understand the economic structure of society; as well as in the publication of a large number of books on economic theory.

Many of these books are not helpful to beginners, whether adolescent or adult. Some are too specialised, dealing with only one particular economic problem. Some are too technical; some already suppose a sound basis of economic theory.

I have found the following small and cheap books very useful and helpful to beginners, and to them I am myself greatly indebted.

PENSON, H.: *The Economics of Everyday Life*: Vols. i and ii (C.U.P.)

JONES, R.: *Everyone's Economics* (Sidgwick & Jackson)

MACGREGOR, H.: *The Evolution of Industry* (Thornton Butterworth: Home University Library)

CLAY, H.: *Economics for the General Reader* (Macmillan)

MARSHALL, A.: *Elements of Economics of Industry* (Macmillan)

CARR-SAUNDERS, A. M.: *Population* (O.U.P.: World's Manuals)

MARRIOTT, J. A. R.: *How we Live* (O.U.P.: World's Manuals)

LEHFELDT, R. A.: *Descriptive Economics* (O.U.P.: World's Manuals)

LEHFELDT, R. A.: *Money* (O.U.P.: World's Manuals)

WITHERS, HARTLEY: *The Meaning of Money* (Murray)

BURNS, E.: *Modern Finance* (O.U.P.)

LEAF, W.: *Banking* (Thornton Butterworth: Home University Library)

More difficult books are:

- CANNAN, E.: *Wealth* (King)
MARSHALL, A.: *Principles of Economics* (Macmillan)
GIDE, C.: *Principles of Political Economy* (Harrap)
TAUSSIG, F. W.: *Principles of Economics*: 2 Vols. (Macmillan)

A SUPPLEMENTARY BOOK LIST (1947)

The following books should be consulted in connection with Chapters XXI-XXIV, added in the second edition (1947).

- HENDERSON, H. D.: *Supply and Demand* (C.U.P.)
ROBERTSON, D. H.: *Money* (C.U.P.)
ROBERTSON, D. H.: *The Control of Industry* (C.U.P.)
HARROD, R. F.: *International Economics* (C.U.P.)
ROBINSON, M. E.: *Public Finance* (C.U.P.)
WRIGHT, H.: *Population* (C.U.P.)
ROBINSON, E. A. G.: *The Structure of Competitive Industry* (C.U.P.)
DOBB, M.: *Wages* (C.U.P.)
ROBINSON, W. H.: *Money and the Citizen* (Duckworth)
BEVERIDGE, Sir W. H.: *Full Employment in a Free Society* (Allen and Unwin)
CROWTHER, G.: *An Outline of Money* (Nelson)
TITMUS, R. M.: *Birth, Poverty and Wealth* (Hamilton)
WHALE, R.: *International Trade* (H.U.L.)

SUMMARIES

CHAPTER I

WORK AND WANTS

Man has wants. He works to satisfy his wants.

The simpler the economic life the more direct is the relation between work and wants.

Any labour is productive if it satisfies a want. There can be misdirected labour if the product fails to satisfy a want.

Labour is to-day organised in industries. The four chief industries are:

1. Extractive
2. Constructive
3. Commercial
4. Transport

The forms of labour have been divided into

1. Mental and Manual
2. Skilled and Unskilled
3. Responsible and Automatic

but the classification is not rigid, for they merge.

Wants, too, have been divided into

1. Necessities
2. Comforts
3. Luxuries

but again this classification is not rigid.

There are in addition Conventional Necessities.

In order to have economic consequences Wants must be Effective. There must be Willingness and Ability to satisfy the want.

There may be wants for Concrete things or Commodities or for Services.

Wants too:

1. Create Wants
2. Are competitive (*e.g.* tea or coffee)
3. Are complementary (*e.g.* table and chair)
4. Are limited in their capacity for giving satisfaction (law of satiable wants)
5. Are supplied whether good or bad

Wealth results from the Satisfaction of Wants.

CHAPTER II

PRODUCTION AND ITS ORGANISATION

Production is the process by which goods and services are made available to satisfy human wants. But as all wanted commodities and services must have Utility, production is the creation of Utilities.

Some wants are satisfied without Work. They are Free Goods.

The work needed to satisfy wants can be performed by one's self or by parents, or relatives, or by one's ancestors.

Production is the creation of Utilities. These Utilities can be of:

1. Place
2. Time
3. Form
4. Personal Utilities

In the process of production there is a distinction between:

1. Production Goods (those which are a means of satisfying of the Final Consumer)
2. Consumption Goods

THE FACTORS OF PRODUCTION are:

1. *Land.* This includes The Gifts of Nature
2. *Labour.* Note there is a distinction between Population and Labour Supply

3. *Capital*. This can be divided into:
 - a. Material
 - b. Non-Material (Knowledge)

Land is:

1. A Natural Factor
2. Limited in supply, although the productivity of land can be increased by:
 - a. Science
 - b. Transport
3. Relatively indestructible

Capital is:

1. A product of labour
2. Limitless in supply
3. Constantly wearing out and has to be replaced

Land and Capital have in common that they:

1. Can be privately owned
2. Can be separated from their owners
3. Are passive agents in production as compared with labour

Capital is classified as:

1. Fixed, when capable of giving repeated services
2. Circulating, when it can perform a service once only

The application of Labour to Land creates wealth. Wealth is anything that satisfies a human want (and is not unlimited in quantity). Capital is that part of wealth which is used for further production.

CHAPTER III

SPECIALISATION OR THE DIVISION OF LABOUR

Division of Labour or Specialisation is the distinguishing feature of modern economic civilisation. John Stuart Mill classified this into:

1. Simple
2. Complex

Earlier division of labour probably according to:

1. Age
2. Sex
3. Manual dexterity
4. Mental capacity

And Separation of Functions according to:

1. Ruler
2. Priest
3. Warrior
4. Worker

During the evolution of specialisation there emerge the distinctive industries of our times:

1. Extractive
2. Constructive
3. Commercial
4. Transport
5. Professional Services

THE ADVANTAGES OF DIVISION OF LABOUR:

A. *To Society:*

1. Increased production
2. Cheaper goods
3. Stimulus to invention
4. The invention of machinery
5. Economy of tools
6. Saving of time
7. Increase of knowledge
8. Facilitates saving
9. Makes possible the localisation of industries.

B. *To the Individual:*

1. Gain in skill
2. Gain in leisure
3. Eases toil
4. Makes possible the choice of a career
5. Cheapens commodities and services, and gives greater variety

THE DISADVANTAGES OF DIVISION OF LABOUR:

A. *To Society:*

1. The Standardisation of goods
2. The possible injury to citizenship

B. *To the Individual:*

1. Monotony of work, which is, however, better than monotony of life
2. He is at the mercy of industrial change, although it is said that tasks are so simplified that change from one craft to another is easier

CHAPTER IV

THE ORGANISATION OF INDUSTRY

Organisation is essential to industry because

1. Every man, every machine is specialised
2. Production is very roundabout
3. Production is carried ahead of demand and in anticipation of demand
4. The organiser has to decide on the proportions of the factors of production he has to use. To him land, labour and capital are factors to be demanded jointly.

Industry, so carried on, requires a class of risk takers.

The Risks in industry are:

1. Effective demand may be miscalculated
2. The possibility of substitutes
3. Vagaries of Nature
4. The new industry may adversely affect other industries

Consequently there are two additional Factors of Production:

1. Organisation
2. Risk

TYPES OF BUSINESS ORGANISATION:

1. The One Man Business
2. The Partnership
3. The Joint Stock Company
4. The Consumers' Co-operative Society
5. Public Utility Companies
6. Government Monopolies

A. THE ONE MAN BUSINESS:*Advantages:*

1. Personal interest and supervision
2. Self interest acts as check on waste
3. Contact with customers
4. The pioneer of new industries
5. Helped by the decentralisation of industry consequent on electrification
6. Its flexibility
7. Able to satisfy demands which cannot be standardised

B. THE PARTNERSHIP:*Advantages:*

1. Combination of capital and business capacity
2. Possibility of division of labour between partners

C. THE JOINT STOCK COMPANY:*Advantages—To the Company [External Economies:]*

1. Mobilisation of large capital
2. Can secure the advantages of large scale industry
3. Its size acts as an advertisement
4. Can afford the best business brains
5. Its longevity
6. Able to weather bad periods of slump
7. Saving on advertisement

[Internal Economies:]

These are mainly the advantages of Large Scale Industry

1. Able to buy and sell in bulk
2. Able to secure cheaper transport facilities
3. Able to secure the economies of closer specialisation

4. Able to afford the most expensive machinery which is cheaper in the long run
5. Able to afford and give a market to the best professional services
6. Able to utilise the advantages of by-products

To the Individual Worker

1. Able to give better wages
2. Securer employment
3. Opportunity for promotion
4. The best market for specialised skill
5. Aids the formation of Trade Unions
6. Able to experiment—such as Welfare Work

To the Individual Investor

1. By spreading his investments able to minimise risks
2. Can sell his shares without injuring the business

The Joint Stock Company raises new problems

1. The distinction that arises between Capital Control and Capital Ownership
2. The Anonymity of Capital
3. The dehumanisation of industry
4. The expensive and specialised nature of Capital equipment may check new industrial development
5. The rise of a class of mere buyers and sellers of shares

The Structure of the Joint Stock Company

1. Ordinary Shareholders are Owners
2. Debenture Shareholders are Creditors
3. There are in addition Preference and Deferred Shares

This structure facilitates

- a. Watering the Capital
- b. The growth of Holding Companies and Trusts.

D. THE CONSUMERS' CO-OPERATIVE SOCIETY

1. Secures the economy of Large Scale Organisation
2. The advantages of a stable market
3. Is an example of democratic control in industry

E. PUBLIC UTILITIES

1. Direct Control as in the Post Office
2. Indirect Control as in the B.B.C.

F. GOVERNMENT MONOPOLIES mainly as a form of taxation

The French Government monopoly of tobacco and matches, or for strategic purposes as in the German Government's monopoly of railways.

CHAPTER V**COMPETITION AND COMBINATION**

Modern Economic Society is a competitive Society because

1. It permits any person to enter any craft or start any business
2. This economic freedom permits people to compete
3. They compete to serve, that is to sell the same goods more cheaply or better goods at the same price
4. This competition to sell, compels efficiency and economy

Competition is not entirely competition to sell; there is also

1. Competition to buy
2. Land, labour and capital compete for employment
3. Articles of alternative demand compete for employment: e.g. tea or cocoa, wood or coal
4. Because incomes are limited, most wants compete with each other
5. Because there is a freedom of choice, Future Goods compete with Present Goods

There are forces making for Combination against this Competition

1. The full force of self interest is limited by
 - a. Custom
 - b. Inertia
 - c. Ignorance

2. Ideas of Fair Price as against a Competitive Price
3. Combination for Social as well as Industrial purposes
4. Trade Unions, and by the fact that
5. Fierce competition is self-destructive

There are consequently Combinations to Sell and Combinations to Buy.

The more powerful is the Combination to Sell. This is aided by

1. The strong localisation of Industry
2. The Technical considerations of industry
 - a. When industries are heavily capitalised
 - b. When the ratio of Overhead Costs to Prime Costs is high

THE ADVANTAGES OF COMBINATION. There are

1. Social Advantages
2. Economic Advantages
3. Competitive Advantages

Social Advantages:

1. Production can be adjusted to demand so that there is no waste
2. Unproductive or uneconomical factories are closed

Economic Advantages:

1. Increasing application of the economies of large scale industries
2. The pooling of patent rights, etc.
3. The economies in salesmanship
4. The economies in cross freights
5. The use of by-products

Competitive Advantages:

1. The Boycott
2. Price Differentiation

TYPES OF COMBINATION:

1. The Cartel
2. The Merger
3. The Holding Company

4. The Trust

5. The Industries which by their "technique" can be run efficiently only as a Monopoly

Combinations can be 1. Horizontal, 2. Vertical, in structure.

State Control of Technical Monopolies is facilitated by the fact that

1. Their market is limited by their equipment
2. They lend themselves to Routine
3. Little marketing skill is needed
4. No fear of competition either from at home or abroad

THE LIMITS OF LARGE SCALE INDUSTRY:

1. Human Capacity
2. In some industries Small Scale organisation has the advantage
3. The possibility of changing demand
4. The possibility of substitutes
5. The extent of the market
6. A point may be reached when any increase in the size of the industry gives a less than proportionate return

CHAPTER VI

POPULATION

The problem as to whether any country is overpopulated may mean that

1. There is no more room for people to enter or to live
2. That the Standard of Life is suffering by the increase of population

But few people put forward 1. when discussing population, while Mill answered 2. by his statement that "God sends a pair of hands with every mouth"

The problem became acute in the eighteenth century and Malthus argued that

1. Population increased in geometrical progression
2. Food could only increase in arithmetical progression because of the application of the "Law of Diminishing Returns" to produce from land

so that there would always be a "struggle for survival" unless population was controlled.

Modern economists prefer the Law of Non-Proportional Returns. As population increases food will increase at a faster rate till the Point of Maximum Return is reached. Then, after that point has been reached, the Law of Diminishing Returns becomes effective. Then any increase in the labour and capital applied to production will give less than a proportionate increase of the product.

This Law of Non-Proportionate Returns applies to manufacture as well as to agriculture.

Consequently the people living in the country when this Point of Maximum Return has been reached is the Optimum Number. Any increase or decrease would mean less production per head of population.

The Point of Maximum Return is not a rigid point, so that the Optimum Number of People is not a rigid figure.

The Optimum Number will depend on

1. The size of the country
2. The qualities of the people
3. Their material and non-material equipment
4. Their powers of co-operation
5. The law and order in the land

It will move with every new invention, with new knowledge, with better co-operation.

England may then have been overpopulated when the number of her population was less than it is to-day.

Just as there is a Total Optimum Number for the whole country so there is an Optimum Distribution of that number among different areas and occupations.

People have moved mainly for economic motives, so that

wage rates decide where people are wanted. But it is doubtful

1. Whether wages influence total population
2. How far they influence the entry into trades

For there are Economic Frictions to the free movements of people

1. In the case of adults
 - a. Aliens' Laws
 - b. Local attachments
 - c. The general immobility of labour
 - d. Trade Union regulations
 - e. Housing
2. In the case of youth
 - a. Occupations tend to be hereditary
 - b. The localisation of industry
 - c. The cost of training

By population is meant only the Working Population.

The State prevents the deterioration of future production by supplying services which, if left to the economic efforts of parents, would be unsupplied.

CHAPTER VII

THE PROBLEM OF VALUE

1. The Value of a commodity or a service is the rate at which it exchanges for other commodities and services.
2. "Exchange is the barter of the comparatively superfluous for the comparatively necessary."—(Jevons.)
3. Values are expressed in money terms.
4. Values are
 - a. Subjective. (Value in use or Utility)
 - b. Objective. (Value in Exchange)
5. Prices measure values.

A Theory of Prices is narrower than the Theory of Value for

- a. "A price is a fact. Value is an estimate of what the price ought to be."—(Hadley.)
 - b. Price is the same for all. Value will differ
 - c. There is no price on things not for sale
6. There are three theories of value
- a. The Labour Theory
 - b. The Cost of Production Theory
 - c. The Marginal Utility Theory
- A. THE LABOUR THEORY OF VALUE:
- 1. This Theory says that labour is the source of all wealth
 - 2. Machinery can be regarded as stored up labour
 - 3. Labourers should then enjoy the fruits of their labour
 - 4. It deals from the Supply side of value, because of the Paradox of Values, that commodities with the greatest utility have the lowest exchange values and commodities with little utility have high exchange values (bread and diamonds)
 - 5. Also because utilities differ to different people the theory from demand side appears difficult to explain
- a. *Its attractions:*
 - i. Relates the value of things to the effort
 - ii. It seems equitable that two days' work should have twice the value of one
 - b. *Criticisms:*
 - i. What is the unit of labour which measures value?
 - a. As between a doctor and a docker
 - b. Among manual workers as between weaver and spinner
 - c. Is it a time unit? Then the unskilled and slow have the advantage
 - d. Marx adopts "simple abstract human labour" or "socially necessary labour"
 - e. But how does one know that it is socially necessary except by bringing it to the market?

- f.* So that the labour itself has to be valued
- g.* The theory then argues in a circle
- h.* If the product of labour is not wanted then the labour cannot give it value
- i.* Labour seeks to make those things that are valuable; it does not create the value
- j.* It is no explanation of the Paradox of values
- k.* It does not explain why things change in value after they have been made
- l.* Some commodities lose in value if too much labour is applied

B. THE COST OF PRODUCTION THEORY OF VALUE:

- 1. This Theory says that the value of a commodity depends on its cost of production—then more accurately is added, under the most disadvantageous conditions prevailing
- 2. It relies on competition to keep the value of a commodity as near to the cost production as possible

Criticisms:

- 1. Like the Labour theory it tries to explain value from the side of supply
- 2. So it does not account for the Paradox of Value
- 3. It does not explain changes in value after the goods have been produced
- 4. It does not explain scarcity values
- 5. The term Cost of Production is vague. Does it mean
 - a.* Prime costs or Total costs?
 - b.* The cost of production will vary according to the industry and the output. For the industry may be working under
 - i.* Increasing Returns
 - ii.* Decreasing Returns
- 6. It does not explain Monopoly conditions

7. The Cost of Production is itself made up of a number of commodities which are valued. What decides their value? What decides the value of the land, labour and capital whose costs make up the cost of production?
7. Does Value then depend on Utility? but
 1. Values remain the same, while utility differs
 2. They appear to vary inversely to each other
8. The solution to the problem is reached through the Law of Diminishing Utility, which says that each additional unit of a commodity gives less satisfaction than the previous one.
9. Most difficulties of the problem of Value are answered by the Marginal Utility Theory of Value.

The Marginal Utility Theory of Value explains

1. The Paradox of Value
2. Why things are more highly valued in a dearth
3. Why a luxury is more highly valued than a necessity
4. Price measures the marginal utility of a commodity

Note also the importance of the ideas of

1. The Marginal Purchaser, the person who is just tempted to buy at the price
2. The consumer will so regulate his purchases as to secure the greatest marginal utility from each purchase
3. The producer will employ the factors of production in such proportions that the marginal returns from each are equal
4. The Marginal Firm, the firm that, at the price ruling and the conditions prevailing, can survive
5. The Producers' Surplus, the surplus enjoyed by firms with greater advantages than the marginal firm
6. The Consumers' Surplus, the surplus enjoyed by those purchasers who would pay more for the commodity because they value it higher, but who only pay the market price

The Marginal Utility Theory then considers both supply and demand.

Demand and supply tend to meet at a point where the marginal utility is equal to the marginal cost of production (both of course measured in money terms)

CHAPTER VIII

SUPPLY AND DEMAND OR HOW PRICES ARE FIXED

The Value of a commodity depends on its marginal utility.
The Price of an article depends on Supply and Demand.

The value of a commodity will decide

1. That factors of production should be diverted either from or to its making
2. The value of those factors going to its production so that the value of the factors of production is *derived* from the value of the product

A Perfect Market connotes free competition among sellers and buyers. In a perfect market there can only be one price for a commodity.

Now the utility of a commodity is influenced by demand.

Demand implies

1. The possession of Means to make it effective
2. Willingness to do so
3. There is no such thing as Demand apart from price

So that

1. Demand varies with price
2. Demand increases as price falls
3. Demand falls as price increases

The Effective Demand for a commodity may be

1. Elastic, when the demand varies greatly with any change in price
2. Inelastic, when it varies little, with a change in price

Examples of *Elastic Demand* are

1. Generally luxuries
2. Part of a supply of a commodity

Examples of *Inelastic Demand*

1. Generally necessities
2. The very cheap things of life
3. The whole supply of a commodity

Some commodities are demanded jointly.

Joint Demand may be

1. Fixed (knife and fork)
2. Variable (pipe and tobacco)

Effective Demand will also vary

1. According to time
2. According to occasion
3. The possibility of substitutes

There will be an increase in the Effective Demand for an article when

1. The commodity becomes cheaper
2. Its utility increases

There will be a decrease in the Effective Demand of an article when

1. There is a rise in price
2. Its utility decreases

But a rise in price will bring about an increase in the amount produced and offered for sale.

A fall in price will bring about a decrease in the amount produced and offered for sale.

That is, price will influence the supply of a commodity.

There is no such thing then as supply apart from price. The Effective Supply is the amount offered at a price.

Now the Effective Supply is

1. Elastic when it responds easily and rapidly to price
2. Inelastic when it does not respond rapidly to price

Whether Supply is elastic or inelastic will depend on the nature of the industry—whether producing under increasing or decreasing returns

There are also articles of an

1. *Alternative Demand and Supply:*

- a. There is an alternative demand for wool or cotton
- b. There is an alternative supply of coal to be used for manufacture or home

2. *Composite Demand and Supply:*

- a. There is a composite demand for wood.
- b. There is a composite supply of boots from many factories

3. *Joint Demand and Supply:*

- a. There is a joint demand for tables and chairs
- b. There is a joint supply of beef and hides

A Monopolist need not respond to changes in price of a commodity. He cannot, however, control both price and output. He can

1. Set a price and at that price leave the demand to be decided for him by the marginal buyer
2. Fix the output and let the consumer decide the price

Prices then

1. Adjust supply to demand
2. Ration out the supply of a commodity among those able and willing to buy
3. Act as an index to producers

CHAPTER IX

MONEY AND ITS FUNCTIONS

Money

1. Is not wanted for its own sake but for what it will buy
2. Facilitates exchange, because Barter involves the difficulty of a double coincidence of wants

The Functions of Money are

1. It acts as a Medium of Exchange
2. It acts as a Unit or Standard of Value
3. It acts as a Standard of Deferred Payment
4. It acts as a Store of Wealth

Metallic Money displaced earlier forms because it is

1. Compact
2. Portable
3. Uniform
4. Easily recognisable
5. Can be divided without loss of value
6. Not subject to vast changes of quantity
7. Durable
8. Not too cheap or too valuable for everyday use
9. Above all because it possesses a Utility of its own

Gold is ceasing to function as a Medium of Exchange and is becoming increasingly a Standard of Value.

Gold and Silver and Copper coins are coined and given the quality of Legal Tender. Gold coins are Full Legal Tender to any amount. Silver and Copper coins are Token coins.

When the value of the principal unit of money equals in value a fixed amount of gold, the currency is known as Gold Standard Currency.

The Government allows the coinage of gold to be free and gratuitous. One ounce of gold is coined into £3 17s. 10½d. or exchanged for £3 17s. 9d. at the Bank of England. That is, during normal times the Mint Rate and the Bullion Rate of gold are kept identical by free coinage. Since England has gone off the gold standard the Market price of gold has risen far above £3 17s. 10½d.

Token Coins are kept to their value by

1. Limitation of Issue
2. Limitation in amount for which they are legal tender, Silver for 40s., Copper for 12d.

When a country has only one Standard of Value it has a Mono-metallic Currency. (England demonetised silver in 1816.)

Arguments for Bi-metallism:

1. Joint production of gold and silver is more steady than of only one. Prices would therefore be more regular
2. The double standard would average out the rise and fall in price when based on one metal alone

3. Gold supply of the world is insufficient for world trade
4. It would make possible a par of exchange with silver-using countries

Arguments for Mono-metallism:

1. Because the Market ratio of the metals varies, then the Mint ratio will have to be altered constantly
2. When two metals circulate then Gresham's Law will begin to operate: "Bad money will drive out good"

PAPER MONEY will include

1. Inconvertible Notes. This is an inelastic currency. The danger of over-issue is always present. Over-issue is recognised by
 - a. Disappearance of gold
 - b. Premium on gold
 - c. Rise in prices
 - d. Adverse foreign exchange
 - e. There may be two prices, Gold prices and Paper prices
2. Convertible Notes. This merely economises gold.
3. Fiduciary Paper Notes
4. Bank Notes
5. Cheques
6. Bills of Exchange

CHAPTER X

MONEY AND THE LEVEL OF PRICES

The Value of Money is what money will buy.

A Price is the amount of money for which a commodity or service will exchange in the market.

The General Level of Prices is measured by Index Numbers. To give greater accuracy to the Index Number the more important articles are weighted.

Valuable as the Index Number may be, there are certain drawbacks

1. The number of articles may be limited
2. Wholesale prices are taken
3. The price of raw materials is taken
4. The quality of the goods may vary
5. Services are omitted

so that

1. There should be index numbers made out for different classes of people
2. Over too long periods, the index number is not helpful for goods vary, tastes vary, new wants have appeared
3. Between countries of vastly differing customs and traditions, the index number cannot be used as a basis for comparison

What causes the changes in the Prices Level or What causes money to Appreciate or to Depreciate?

Prices

1. Will fall when production increases (other factors being equal)
2. Will rise when production decreases (other factors being equal)
3. Will vary directly with the amount of money in circulation
4. Will vary with the velocity of money

The Quantity Theory of Money states that the Level of Prices will vary with

1. The Volume of Trade
2. The Quantity of Currency
3. The Velocity of Circulation

The formula is $M.V.=P.G.$

An increase of paper money results in Inflation. When the paper money is withdrawn the currency is Deflated.

Inflation results in Rising Prices which

1. May be beneficial to business men and shareholders
2. Is harmful to all those with fixed incomes, or whose contract payments were arranged before the inflation and are due to last for any long period

3. Wage earners may ultimately receive rises in payments because wages are generally good when trade is good

Deflation results in Falling Prices which

1. May be beneficial to those whose incomes do not fall in the same rate—where the contract of payment was made to last over a long period
2. Are harmful to wage earners because wage cuts begin and in a falling market it is difficult to maintain wage rates. In addition workmen are dismissed and bankruptcies occur which aggravate the situation
3. Are harmful to business men

CHAPTER XI

BANKING AND CREDIT

A. THE ORIGIN AND DEVELOPMENT OF BANKING:

1. Deposits left with the Goldsmiths
2. Their receipts accepted by others as "money"
3. They begin to lend the money which others have deposited
4. The interest on these loans is higher than the rate they pay on deposits. Their profit is the difference.
5. Of course they lend their receipts (which are accepted as money)
6. The danger is that borrowers and lenders may ask money for these receipts

B. As Banking grew as a specialised business then the danger of over-issue was so great that the Bank Charter Act was passed in 1844 which

1. Forbade any new note-issuing bank
2. Except for the Fiduciary Issue, the Bank of England had to keep a cent. per cent. reserve

The controversy that raged was between

1. The Banking School, who wanted to leave the Note issue to the discretion of the bankers

2. The Currency School, who contended that the issue of notes should be regulated by the amount of gold held

The Currency School won the day with the result that

1. Whenever a financial crisis is imminent the Bank Charter Act is suspended
2. The Cheque replaced the Bank note

C. Payments can be made therefore

1. In gold
2. In Bank of England notes
3. By Cheque
4. By accepting a Bill of Exchange

As Cheques can be drawn by

1. Depositors to the extent of their deposits
2. Borrowers to the extent of their loan

Ultimately Claims created against one's self are cancelled out against claims secured over others. This can be done if

1. Purchasers and sellers bank at the same bank
2. If they bank at different banks then the cancellation is done through the Clearing House

For the sake of administration the London Clearing House is divided into

1. Town
2. Metropolitan
3. Country

The Banking System

1. Registers and Cancels out Purchases and Sales
2. Economises Gold
3. Facilitates the exchange of goods

D. A Banker makes his profits by adding to the Media of exchange. Banks are manufactories of Credit, for "a deposit and an issue are the same thing."

The problem of what proportion should be the Reserve to the Liabilities constitutes the Banker's Dilemma.

1. If the proportion is too great, then his profits decline
2. If the proportion is too low, then the risk is great

This problem is met in the U.S.A. by fixing a statutory

minimum. But it has not solved the problem. Generally a smaller reserve will be needed

1. In a sparsely populated area
2. When banks pool their resources

In England the proportion will vary with

1. The state of confidence
2. Business needs

The proportion is still smaller in England because

1. Banks keep their reserves in the Bank of England, which itself does ordinary banking business
2. The Act of 1844 has allowed a fiduciary issue

The reserves are protected by

1. Raising the Rate of Interest so that only those who must have loans borrow at the high rate
2. Lowering the Rate when the market is good

The Board of the Bank of England meet every Thursday and declare the Rate of Discounting Bills. This is known as the Bank Rate.

E. The Rhythm connecting Banks, Industry and Prices.

1. Increase in loans leads to
2. A rise in prices, which leads to
3. An expansion of industry, which leads to
4. A rise in the Bank Rate, which
5. Lessens the demand for loans, which
6. Lowers prices, which causes
7. A return of cash to the banks, which results in
8. A lower rate of interest and therefore
9. An increase in loans

F. The Balance Sheet of a Bank.

1. Liabilities
 2. Deposits of Customers
3. Assets
 4. Cash at hand and at the Bank of England
 5. Loans at call and at short notice
 6. Bills discounted and advances
 7. Investments
 8. Bank premises

"The art of banking is being able to distinguish between a Bill of Exchange and a Mortgage."

The most important item on the balance sheet is the proportion between the Deposits of Customers and the Cash at Hand and at the Bank of England.

G. A balance sheet of the Bank of England.

1. *Issue Department*

2. Liabilities

3. Notes issued
4. In Circulation
5. In Banking Department

6. Assets

7. Government Debt
8. Other Government securities
9. Other securities
10. Silver coin
11. Amount of Fiduciary Issue
12. Gold Coin and Bullion

13. *Banking Department*

14. Liabilities

15. Capital
16. Rest
17. Public Deposits
18. Other Deposits
19. Bankers
20. Other accounts
21. Seven Day and other bills

22. Assets

23. Government securities
24. Other securities
25. Discounts and advances
26. Securities
27. Notes
28. Gold and Silver Coin

H. Measures taken at the outbreak of the War.

1. Bank rate raised
2. Suspension of the Bank Act

3. Issue of Treasury Notes
4. Stock Exchange closed
5. Moratorium declared
6. Extension of the Bank Holiday

I. Arguments for and against the amalgamation of the banks.

a. *For:*

1. Most industries find economies in amalgamation
2. The reserves are better concentrated
3. Risks are better distributed
4. Public accounts
5. Efficiency in control and organisation

b. *Against:*

1. The business may be too great for control and efficiency
2. Concentration of money resources in few hands may be socially undesirable
3. The creation of a Money monopoly

J. The work of the bank.

1. "Exchanges money for credit and credit for money"
2. Receives deposits
3. Grants loans
4. Acts as an agent
5. Cancels indebtedness
6. Keeps accounts of clients
7. Discounts bills of exchange

K. The Social Utility of the Banking System.

1. Helps in the exchange of goods
2. Makes possible specialisation
3. Replaces gold as a medium of exchange
4. Finances production in anticipation of demand
5. "Credit is the exchange of present goods for future goods"
6. Makes possible large scale enterprise
7. Averages out the world's goods and the world's prices

CHAPTER XII

INTERNATIONAL TRADE

A. A market is a place where buyers and sellers meet to buy and sell under perfectly free competition.

The term now covers a commodity as well as a place.

B. In the Money market, the use of money is bought and sold. The chief lenders are the banks. The chief borrowers are Bill brokers and Stock Exchange dealers.

The components of the Money market are

1. The Bank of England and the other Banking institutions
2. Discounting Houses
3. Accepting Houses
4. Dealers in Foreign Bills
5. Underwriters
6. Brokers and Jobbers of the Stock Exchange

The Price of money is the amount charged for its use and depends on the demand and supply of money.

The Value of money is its Purchasing power.

C. The price paid for the use of money is called Interest. The Rate of Interest will then depend on

1. The demand and the supply of money
2. The nature of the loan
3. The length of the period for which the loan is needed

Because there cannot be two different prices for the same goods in the same market, the Rate of Interest and the Rate of Discount will be equal.

The Bank of England rate is a Discount Rate and is generally higher than the Market Rate or the rate charged by the banks. The Call Rate is the rate charged by banks to brokers.

D. International Trade

1. Encourages the production of goods where they can be produced cheaply
2. Discourages production where production is dear

3. Averages out the prices of commodities

4. Facilitates the international division of labour

(Even Speculative dealings in commodities may average out prices. A dealer foresees a shortage in the supply and expects the price to rise. He buys now in the hope of selling later at a profit. His buying leads to higher prices *now* and so in a fall in consumption. So present stocks are not exhausted and therefore the total future supply is greater than he expected. The price then will not be so high as he anticipated and as if the old stock had been exhausted.

If the dealer foresees a glut in supply and a consequent fall in price, he contracts to sell in the future at a price lower than the present. This will tend to lower prices now. Consumption will then increase. When the glut arrives the old stocks will be exhausted and the demand for the new supply will be larger than anticipated. The price then will be higher than expected. Speculation will then level out fluctuations in prices.)

E. International Trade is

1. Governed by the Law of Comparative Costs. Countries will tend to specialise in the production of those commodities for which they have the greatest comparative advantages
2. Financed by the bill of exchange

All foreign trade is carried on within the limits set by the comparative cost of production so that it may pay a country to import a commodity which she can produce more cheaply herself.

Payments are made and indebtedness is cancelled by means of the bill of exchange.

1. It enables creditors to pay debtors in foreign countries
 2. Enables sellers to receive immediate payment
- The Rate of Discount of these bills will depend on

1. The demand for bills
2. The supply of money to satisfy the demand
3. The financial position of the parties concerned

A Finance or Accommodation Bill has the same wording as a Produce Bill and is used to obtain a loan.

The Bill Brokers buy bills not to hold till they mature but in order to sell them at a profit.

The *Rate for Money* is the rate at which bill brokers borrow money from the banks.

F. *Exports and Imports*

1. Balance in the long run
2. There must also be included the Invisible exports and imports
 - a. The services of carriage, insurance, banking
 - b. Dividends on investments
3. In the short run an adverse balance will be reflected in an adverse rate of exchange

G. The causes in the variations in the rate of exchange may be due to

1. The relative indebtedness of the two countries.
2. The rate of interest charged in the two countries.

The Mint Par of Exchange between two countries indicates the equivalence between the coinages of the different countries as determined by a comparison of their weights and fineness.

Thus the Mint Par of Exchange between England and France and between England and Germany was 25.22 and 20.42.

The Gold (and Specie) Points are the points above or below the mint par of exchange at which it is cheaper to import or export gold than a bill of exchange. They are the limits of fluctuation between the mint par of exchange and the cost of shipping gold.

As long as there is gold available the rate of exchange cannot go above the gold points.

CHAPTER XIII

THE NATIONAL INCOME

A. Only that which is produced can be distributed.

If we knew the value of Utilities created, then we should know how much there is to distribute.

But allowance must also be made for depreciation. From the Gross Product of industry only the Net Product can be distributed. The sum total of the Net Product of all industries in the realm, comprises the National Income.

Stamp's definition of the National Income: "The aggregate money expression of those goods produced and services performed by the inhabitants of the country in a year which are in fact generally exchanged for money."

Marshall's definition: "The aggregate net product of, and the sole source of payment for, all the agents of production."

Whatever figure it may be, it will represent riches or poverty according to the amount of people who have to share it.

The difficulties in measuring the National Income are

1. Both production goods and consumption goods are produced, but only consumption goods are to be counted. But some goods can be both producers' and consumers' goods
2. Because wealth is unevenly distributed the prices of some goods are artificially high

The National Income is not a static amount. Wealth is a flow and as a result society is able to absorb the annual increase of population.

But the wealth of a community consists not only of material things. It also consists of its non-material equipment.

Just as the value of a machine depends on the income it will bring, so the value of skill will depend on the income it will bring. Therefore the wealth of a country can be measured by calculating its income, not by totalling up the value of its goods.

B. The relation of wealth to welfare.

1. Generally the relation is direct. The greater the wealth the greater the welfare
2. There are however three important modifications to note
 - a. The growing body of social services tend to equalise welfare
 - b. According to the law of diminishing utility, a person with twice as much income does not enjoy twice as much welfare
 - c. Subjective costs have to be taken into account
3. In addition wealth and welfare will not be identical because
 - a. Some have greater responsibilities; some people are healthier; some have varying needs
 - b. Some receive payments in addition to their wages

C. If distances of space and time are too great then these Indices of wealth are not helpful in comparing, say

1. England and India to-day
2. England in 1032 and in 1932

because

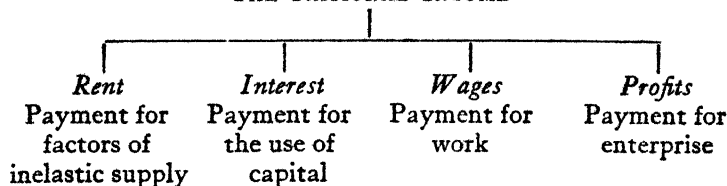
- a. Standards of life are so different
- b. New wants have appeared

The causes for the variation in the National Income will depend on the efficiency of the factors of production. Upon

- a. The wealth of the gifts of nature
- b. The efficiency of labour
- c. The amount and the efficiency of equipment
- d. The organising ability of its entrepreneurs
- e. Upon their success at risk taking
- f. The efficiency of the government.

The distributors are the business men. They distribute the income between Property owners and Workers. They employ the factors of production according to their marginal productivity. Whereas Wages, Interest and Rent are contractual payments, that is they are arranged beforehand; Profits are not.

THE NATIONAL INCOME



CHAPTER XIV

RENT. THE VALUE OF CONCRETE CAPITAL

1. *Commercial*, or *Gross* or *Contract Rent* includes payments

- a. For depreciation
- b. To local authorities
- c. Interest on capital sunk in buildings
- d. For the land itself

Ricardo saw that

- a. Wages was the payment to induce people to work
- b. Interest was the payment to induce people to save
- c. But why was Rent paid? What did Rent induce? For land was there already.

He analysed Land and saw that

1. It is limited in quantity
2. It has natural variations in quality

and stated that Rent is the payment "for the original and indestructible qualities of the soil."

Dr. Marshall's definition is "Rent is the income derived from the ownership of land or other free gifts of nature."

2. Now because of differing qualities of land there arises a *Rent of Fertility*.

Because of differing distances from the market there arises a *Rent of Accessibility*, or of *Situation*.

So that Rents are the outcome of differences which are not due to the efforts of the owner or user.

Because equal yields can only be obtained from the same land at increasing costs, there is

- a. An Intensive margin of cultivation as well as
- b. An Extensive margin of cultivation

These differences will exist whether land is used for food growing or for building sites.

As population grows, there goes on the two processes

1. Increasing the area under cultivation or for building
2. Increasing the expenditure of capital and labour

So that as

1. Population grows and
2. The margin of cultivation recedes

Rents rise.

1. Land has no cost of production

Consequently

2. Rent does not enter into the cost of production
3. Whereas Interest and Wages do determine prices, Price determines rent. "The price of corn is not high because rent is paid, but rent is high because the price of corn is high."

So that Rent is

1. The outcome of differences which are not due to the owner
2. And is, therefore, independent of any payment to the owner
3. The difference obtained by the employment of two equal quantities of capital and labour
4. Price-determined not price-determining
5. The return to a factor of inelastic supply

There are two difficulties to accepting this idea of Rent.

1. Rent *does* enter into the cost of production of every business
2. In England there is no "no rent" land, for rent is paid for even the worst lands

But in answer to (1.) that rent is cost to the business man, it can be replied

- a. Society is concerned with the minimum price it has to pay for its goods
- b. That price is determined on the Margin
- c. Lands above the margin enjoy rents
- d. But production would not suffer if these rents were not paid. For if it paid to produce on the margin it will also pay to produce on lands above the margin

and in answer to (2.) that there is no "no rent" land in England, it can be replied that there is, for

- a. Some payments are only on the capital sunk in the land
- b. As England is influenced by world markets, payments may be Rents of Situation
- c. The margin might be an Intensive one instead of an Extensive one
- d. As farms are mixed, the rents paid average out the good land and bad land. The rents of the better land cover the "no rent" land
- e. Land has various uses. If no rent were paid if the land were used for farming, the land might have greater value as sport land. It might even have greater value as sport land than as farming land, even if the land were fertile.

This theory has been expanded from Land to apply to all Gifts of Nature, for they possess the three characteristics which produce rents.

1. They are relatively scarce
2. They vary naturally in quality
3. Their supply is inelastic

So that there is a Rent element in Wages, Profits and Interest, wherever different levels of productivity are found which are the result of natural and social causes beyond the control of the individual.

RENT ELEMENT IN CAPITAL.

1. Fixed Plant gives a Rent for like land; the income obtained will depend on the price of the product
2. Capital sunk in Land gives a return exactly similar to land
3. House property will vary in value with the area, like land
4. Social and political causes may give certain industries temporary advantages
 - a. A death in the royal family on mourning goods
 - b. A war on the demand for steel or transport
 These causes create a temporary inelasticity of supply. The value of industries will rise with the rise in value of their product. The payments to such factors of inelastic supply of a temporary nature are known as Quasi-Rents.
5. Any artificial restriction creates an artificial inelasticity of supply. So that there is a rent element in all monopoly gains.

Rent is therefore an "unearned increment."

RENT ELEMENT IN INTEREST.

1. Changes in the rate of interest will do little to affect the total supply of loan capital
2. Therefore like land
 - a. Invested capital has different levels of productivity
 - b. The quantity of capital is independent of payment
 - c. The value of invested capital depends on its product

RENT ELEMENT IN WAGES.

1. Just as there are different levels of productivity in land so there is in labour
2. Payment cannot evoke genius. Like the natural qualities of land it is there, without payment
3. There are different levels of productivity]
 - a. Casual labour is paid some wages

- b.* The skilled can be regarded as having capital sunk in special training
- c.* Some enjoy a Rent of Opportunity
- d.* The genius enjoys a Rent of Ability

CHAPTER XV

WAGES. THE VALUE OF WORK

The share of the national dividend that goes to labour is called wages.

- 1. A Fee is the payment for direct personal service (and is a piece payment)
- 2. A Salary is the payment for services (and is a time payment)
- 3. A wage is the income from work which is supervised. Generally it is the payment for manual labour. It may be a time payment or a piece payment

The Nominal or Money income may not be the same as the Real income for

- 1. That will depend on the Level of Prices
- 2. Some work is regular and some irregular
- 3. Some work is seasonal
- 4. There are cyclical fluctuations in industry
- 5. Some trades are dangerous
- 6. Some are blind alley trades, some offer hope and promotion
- 7. Some trades are more congenial
- 8. Some offer other payments in addition to the wage—a cottage, pensions, uniform, etc.
- 9. Some offer greater leisure, or social standing, or independence

“The attraction of a trade depends not on its money earnings but on its net advantages.”

To obtain an accurate picture of the Real wages then the average should be calculated over

1. Good and Bad periods
2. Perhaps over the working life of a workman

Similarly the Nominal or Money Labour Costs may not be the same as the Real Labour Costs. For

1. The Nominal labour costs is the amount of money paid
2. The Real labour costs is the actual work secured for the money so that
 - a. Wages may be high yet labour costs low
 - b. Wages may be low yet labour costs high

The efficiency of a workman will depend on

1. His own efforts, character, training, health, knowledge
2. The efficiency of the equipment with which he works
3. The efficiency of the firm and the organisation

Where Overhead charges are high, an increase in wages will not be so difficult to secure as when the Overhead charges are low.

Methods of wage payments.

1. *Time Rates*
 - a. When the work is not easily standardised
 - b. When there are periods of idleness
 - c. When the machinery or the work is very delicate
 - d. Are payments for professional services
2. *Piece Rates*
 - a. Are payments according to output
 - b. No supervision needed
 - c. Gives appearance of fairness
 - d. Results in increased output
3. There are experiments of payments by
 - a. Sliding Scale on output and price
 - b. Premium Bonus System
 - c. Scientific Management
 - d. Profit Sharing and Copartnership
 - e. State control through Trades Boards
 - f. The application of industrial psychology

Inequalities of wages are due to

1. The five reasons suggested by Adam Smith
 - a. Agreeableness of the occupation
 - b. Ease with which learnt
 - c. Regularity of employment
 - d. Trust imposed on the earner of the wage
 - e. The possibility of success
2. Custom and Tradition sets a
 - a. Trade standard
 - b. Grade standard
3. Supply and demand of labour, but the Supply of a particular kind of labour may be limited by
 - a. The cost of training
 - b. The time taken in training
 - c. Ability

so that the supply is not smoothly responsive to demand.

4. The bargaining strength of employers and employees
5. The economic frictions to the free flow of labour and the general immobility of labour

There are three theories of wages.

1. The Subsistence Theory
 2. The Wages Fund Theory
 3. The Marginal Productivity Theory
1. The *Subsistence Theory* of Wages states that
1. All wages must be on a subsistence level, for
 2. If wages were above the subsistence level then a larger population would result and the competition would bring wages down again
 3. If wages were below the subsistence level then the labour scarcity would force wages up

Criticisms of the Subsistence Theory.

- a. It is not true that wages rates and population are so related
- b. Real wages have been increased with no fall in wages
- c. The term subsistence level has no *scientific* meaning, for it varies from age to age and people to people
- d. It does not account for variations in different trades and different countries

2. The *Wages Fund Theory* of Wages states that Wages depend on the proportion between population and capital, but this theory confuses
 1. Wages and labour cost. For wages can increase without encroaching on capital.
 2. It is not true that capital is so mobile
 3. Variations are not at each other's expense
3. The *Marginal Utility Theory of Wages* states that Employers buy the factors of production according to their marginal utility. Labour is then paid according to its marginal productivity. So that
 1. If any change occurs which increases its productivity, wages will rise
 2. If labour increases relative to capital and land, then its productivity declines and wages will fall
 3. If labour decreases relative to capital and land, then its productivity increases and wages rise

It explains why wages rates are higher in new countries than in old. Labour is relatively scarce and its productivity is high.

Now as supplementary to the Marginal Utility Theory it should be noted that

1. The term productivity is vague. Does it mean of Market value (the price it is sold for) or of output?
2. Productivity will depend a great deal on equipment, organisation and marketing
3. Labour would be paid according to its productivity if bargaining power were equal between workers and employers

In addition it should be noted that labour has certain peculiarities as a commodity which puts the sellers at a disadvantage.

1. Labour is the most perishable of commodities and cannot be separated from the labourer

(It matters not in the least to the dealer in bullion where he sells metals; it matters a great deal to the seller of labour whether he sells it (if for example he is a bricklayer) to build a palace or construct a sewer.)

2. Labour would have some value even if the supply increased indefinitely
3. The population and the labour supply are not identical, while even among those who do work their output will depend on ability and will
4. *The Wages of Men and Women.*
 1. Wages are not paid according to responsibility but according to productivity
 2. The entry of women into certain callings is hindered by
 - a. Tradition
 - b. Prejudice in favour of men
 - c. Trade union action
 3. So that women crowd into those callings which will have them, so that the supply is relatively large and their productivity low, and therefore their wages low
 4. This reacts on those who work in the same callings as men, for they have few alternative openings
 5. If such frictional influences were removed it is probable that women's wages would tend to equal men's.

CHAPTER XVI

PROFITS: THE PAYMENT FOR ENTERPRISE

- A. A wealthy person is one who has many commodities and services with which to satisfy his wants. A poor person has few.

Capital is that part of wealth which is used for further production. Saving involves the sacrifice of present wants to future wants.

Saving can be made by

1. Individuals
2. Companies
3. The state and municipalities

The pre-requisites for saving are

1. Ability and willingness to save
2. Opportunities for saving must exist
3. The savings must be used productively
4. Law and order must exist to safeguard the savings
5. Recognition of property rights

Saving and Spending are both spending, but

1. Different things are bought at different times
2. Spending is buying Present goods or Consumers' goods
3. Saving is buying Future goods or Producers' goods

Capital has been divided into

1. Fixed—fulfils its function in one use, which is durable and can be used again
2. Circulating—fulfils its function in one use

or

3. Sunk—which is highly specialised
4. Floating—which can be used for different purposes

B. PROFITS.

Profit is the share in the flow of wealth which goes to the owners of businesses. It is calculated by deducting expenses from receipts.

Gross or Commercial Profits include

1. Interest on money invested
2. Payment for risk. (In Joint Stock Companies the risk is separated from management)
3. Wages of management
4. Quasi-Rents
5. The reward for enterprise

Pure or economic Profits are the reward for enterprise.

Profits vary because

1. Some businesses run greater risks
2. Some businesses turn over their capital many times a year

3. In a Private Firm, the owner works, so that payment for management is included in the profits such as is not the case in a Joint Stock company. In addition, if he works
 - a. On his own capital, then the interest on the capital will be included
 - b. On borrowed capital, then the interest will be counted as an expense

To get at the true profits then

1. The average over good and bad years is to be taken
2. For industry as a whole, the average for successful and for unsuccessful firms should be taken.

Why are profits higher than wages? Because

1. Successful business enterprise is rare
2. The ownership of capital, which is essential, is also "rare"

There is then a scarcity value on business enterprise.

The greater inequalities among profits than among wage payments are due to

1. Inequalities between capacity
2. Inequality of wealth
3. The need for specialised knowledge (which makes it difficult to change from one business to another)
4. The importance of goodwill and
5. Established connections
6. Inner knowledge of markets
7. Differential advantages of site, patent rights, etc.

- C. Profit is the return to the entrepreneur for his enterprise. Interest is the price paid for the use of capital. It is the return on loan capital.

Gross or Commercial Interest includes payments

1. For greater risk
2. For management
3. Quasi-Rents
4. Profits

Theories of Interest.

1. Exploitation Theory
2. Abstinence Theory, but can it be called abstinence in the case of the thrifty class, the business class and the wealthy class, who will all save at no matter what rate?
3. Productivity Theory, but this satisfies only the demand side
4. The supply side is met by the Agio Theory. "Interest is the price of time."

There is a demand for capital because

1. It increases productivity
2. Of the intensity of the present needs

The Supply of capital is

1. Limited by the competition of alternative uses
2. Limited by the willingness and the ability of men to forgo present wants for the future
3. Limited by resources
4. Affected by
 - a. The expectation of life
 - b. The general security
 - c. The attitude to the future

It is difficult to say what will be the result on the supply of capital, if the rate of interest changes in industry as a whole. In a particular industry, however, the rate of interest will be effective in deciding whether capital should or should not be forthcoming. The productivity of capital will differ in different industries and at different times.

The rate of interest and the demand for money are connected in industry as a whole, for at the rate ruling so many people will demand it and so many will supply it.

The rate of interest will rise when

1. Land and labour increase relatively to capital
2. New inventions increase the productivity of capital

and

3. The more rapidly capital wears out

The rate of interest will fall when

1. There is an increase in the expectation of life
2. In established and stable countries
3. Where the sense of duty to the future is paramount
4. Land and labour decrease relatively to capital.

CHAPTER XVII

UNEMPLOYMENT

There is no unemployment where

1. The relation between wants and work is direct
2. Subsistence farming is carried on (although men have to face the dangers of drought and disease)

Unemployment emerges with

1. The growth of the market
2. Large scale industry
3. Division of labour
4. International trade

There are various fallacies about work and unemployment.

1. That accidents and catastrophes create work
2. That lavish expenditure creates work
3. That there is not enough work to go round
4. That machinery creates unemployment
5. That wars create employment

1. Accidents cannot increase the volume of employment because

- a. The effort needed to repair the loss might have been used constructively. Work is applied to repair, not to create.
- b. The destruction of wealth leaves the world the poorer
- c. Society loses in the loss of wealth, the individual in his personal loss; the work performed to make good the loss might have been used more constructively in satisfying further needs

2. Lavish expenditure cannot increase the volume of employment because

- a. If the money spent on such expenditure were not so used it would not be wasted. It would still be used.
 - b. Such expenditure is a form of social waste. Waste can be defined as effort which does not yield a corresponding satisfaction. By the Law of Diminishing Utility such expenditure does not give a proportionate satisfaction socially, as would expenditure on more urgent wants.
3. The amount of work is not limited because
- a. Work creates work
 - b. As long as wants remain unsatisfied so long will be there need of work
(It is, however, probably true that at a particular moment the amount of work to be done is limited, e.g. unloading a ship, sweeping snow)
4. Machinery does not create unemployment because
- a. Productivity is increased by the aid of machinery.
(Could we imagine a machine-less world?)
 - b. The introduction of machinery
 - i. In the short run creates temporary unemployment
 - ii. In the long run increases employment
- In the short run, machinery displaces men. For
- a. The employer uses men or machine according to their marginal productivity
 - b. The fact that he can replace men by machine is sometimes called the Law or Principle of Substitution. He can substitute men or machinery (or land), using them in the proportion which will give him the maximum return
 - c. The men are unable to find alternative employment because of the immobility of labour or because of various frictional hindrances to the free flow of labour

In the long run, machinery creates employment. For

- a.* Machinery increases production and so cheapens goods
- b.* Consumers can now buy the commodity who could not afford to do so at the previous price
- c.* Those who have already bought the commodity can now at the cheaper price buy more or with the surplus they now have, (because of the cheapness of the commodity) they buy other goods and create employment there
- d.* The employer too, with his increased profits satisfies new wants and creates employment in those industries
- e.* Men are needed to make the machinery

5. Wars cannot increase the volume of employment. For

- a.* The war diverts production to war purposes. When the war ceases, the equilibrium of industry has to be regained.
- b.* It destroys wealth and leaves the world the poorer
- c.* It burdens industry with a load of high taxation
- d.* Because of the poorer world there is less demand for commodities
- e.* The productive capacity of the nation is impaired
- f.* Markets and goodwill are lost
- g.* These conditions may be aggravated by peace conditions
- b.* For if reparations are imposed, then
 - i.* If they are paid in goods, they affect adversely the industries of the country receiving them
 - ii.* If in gold, then it entails the "rationalisation" of industry and increased competition

The causes of unemployment are

- 1. Particular**
- 2. General**

The particular causes of unemployment are

1. Casual labour or casual demand for labour
2. Seasonal trades
3. Changes in *supply* of a commodity, which may be due to
 - a. War
 - b. Climatic conditions
 - c. Disease affecting the source of supply
4. Changes in the *demand* for a commodity which may be due to
 - a. Change in fashion
 - b. Change in public taste
 - c. The entry of a substitute
5. Technical changes within the industry. The progress of industry. (Water power replacing coal, the taxi replacing the cab)

The general causes of unemployment are

1. Faulty anticipation of demand
2. Faulty estimate of demand
3. Imperfect co-operation among producers
4. The fact that industries cannot expand or contract at the same rate
5. The "Sun spot theory" as a cause
6. The greater risk of over-production of producers' goods
7. The "Under-consumption theory" as a cause
8. The influence of banks and their monetary policy
9. The "Psychological theory," the fact that industry and commerce are based on "confidence"

CHAPTER XVIII

TAXATION

1. In the eighteenth century there grew up in England the ideas and the policy of *laissez faire*.

It was thought that Freedom of enterprise meant Opportunity for enterprise.

2. The State enters into the Economic arena to

1. Facilitate
 2. Supplement
 3. Control private enterprise
- according as it thinks fit.

A. In *production* by

1. Factory laws
2. State insurance
3. Labour exchanges
4. Trades boards
5. Housing laws
6. Patent and copyright laws
7. Its influence on the number and quality of the population

It so helps to reduce the Subjective Costs of industry.

B. In *distribution* by

1. Giving free education and granting pensions
2. Providing museums and parks
3. Housing schemes

because of this

1. Wealth and welfare are not identical
2. There is a growing income from "Civic Rights"

3. The analogy between the State and the individual

1. They both have wants and a standard of living
- but
2. Whereas the individual employs labour only at a profit, the State does so to increase welfare
 3. Individuals do not receive from the State benefits in proportion to their payments (the less one contributes, the more does one receive)
 4. The State decides its wants first, and then seeks a revenue to satisfy its wants
- 4. Government expenditure has been divided into**
1. Productive, when some revenue can be shown
 2. Unproductive, when no monetary return can be shown

The income of the state is obtained from

1. Its property
2. Its productive enterprises
These are known as Quasi-Private state revenue.
3. Taxation
5. Taxation is divided into
 1. Direct—taxes on income
 2. Indirect—taxes on goods, which can be
 - a. Excise duties or
 - b. Customs duties

When the duty is levied on the value of the goods it is known as *Ad Valorem*. When on the quantity of goods it is known as *Specific* duties.

Where the burden of the tax falls is known as its Incidence

1. In the case of Direct taxes, generally on the payer
2. In the case of indirect taxes, generally on the final consumer

The state may use taxation for

1. Revenue purposes
2. Moral purposes
3. Social purposes
4. Political purposes
6. The Canons of taxation

1. Equality. This does not mean Proportionate but Progressive taxation. Generally Direct taxation can be made Progressive. Indirect taxation is generally Regressive.
2. Certainty
3. Convenience
4. Economy

and that they should be

5. Productive
6. Elastic

7. The arguments for Indirect or Direct taxation

1. *Indirect taxation*
 - a. Easy to collect because people do not know they are paying

- b.* Only luxuries need be taxed
 - c.* Can be used for moral as well as Revenue purposes
 - d.* No evasion possible
- 2. *Direct taxation*
 - a.* Low cost of collection
 - b.* It is generally productive and
 - c.* Also elastic
 - d.* The taxpayer knows what he is paying and so it may be an aid to citizenship
 - e.* Can be easily adjusted to be Progressive
- 8. Contrast between Taxes and Rates
 - 1. Rates vary according to locality. Taxes are uniform.
 - 2. Rates are levied on property. Taxes are levied on a variety of objects.
 - 3. The amount of money due from rates is known. The amount to be brought in from taxation is never known exactly.

CHAPTER XIX

THE STATE AND TRADE. PROTECTION AND FREE TRADE

- A. The Bullionist Theory of International Trade.
 - 1. Assumed that money was wealth
 - 2. Regulated imports and exports with a view to enriching England
 - 3. Discouraged export of money and import of goods
 - 4. Encouraged export of goods and import of money
 - 5. Laws passed to prevent England being "drained of gold"

This theory was modified to
- B. The Mercantile Theory.
 - 1. Aimed at security a "Favourable Balance of Trade"
 - 2. To restrict the import of those goods which could be produced at home

3. Export of goods was encouraged by bounties
4. Can be summed up as "Protective duties on imports and Bounties on exports"
5. For the ultimate aim was
 - a. Power rather than plenty
 - b. Security rather than abundance

C. Under the influence of the Industrial Revolution of the eighteenth century, the Mercantile ideas were abandoned and Free Trade was adopted.

D. Many states desire to alter the localisation of industries which have grown up as a result of historical and economic causes by imposing a Tariff.

E. There have been many arguments used in favour of a Tariff.

1. Protected industries flourish
2. Tariffs should be used as an emergency measure to cure unemployment
3. To protect well-paid workers against sweated labour
4. To prevent dumping
5. To nurse infant industries
6. To prevent the risks of over-specialisation
7. To secure political independence, and as an insurance against war
8. To make the foreigner pay. To "tax the foreigner."

F. Free Traders reply that in all cases

1. Imports are taxed because they are cheaper than home-made goods
 2. Consequently goods are made dearer for the consumer
 3. In addition, the export trade suffers
- and they answer in turn these arguments by saying to
1. If all industries were protected it would mean
 - a. Dearer goods to the consumer
 - b. Foreign trade would suffer
 - c. The advantages that are obtained by the localisation of industry would be lost
 - d. Of course no country can produce all its wants on its own territory advantageously

to

2. That as an emergency measure it would not answer its purpose, for
 - a. The unemployment would be diverted to the exporting industries
 - b. A tariff once imposed is difficult to remove
 - c. It would mean diverting the factors of production to produce goods for which the area is not suited relatively

to

3. That a tariff would only protect well-paid workers at the expense of the community who pay dearly for their goods and also at the expense of the export trade
 - a. In addition, wages are not the only cause of cheap goods
 - b. It is also difficult to define the exact meaning of sweated labour taking into account varying standards
 - c. It would be better to let conditions be improved by international labour regulation and by local trade union action
 - d. For a tariff would only direct the factors of production along artificial channels

to

4. As a cure for dumping it is argued that
 - a. Dumped goods are paid for; they are not a free gift
 - b. Why protect the consumer against cheap goods?
 - c. If the dumper hopes to destroy native industries in order to secure a monopoly, then he has to face the opposition of other producers. He cannot secure a world monopoly
 - d. And as soon as the goods are dear, competition will reappear
 - e. Dumping is spasmodic and it is unwise to divert the factors of production to meet a temporary situation.

to

5. Tariffs would not nusse infant industries, for
 - a. At the best it is a grave risk; it is not known whether the industry is suitable
 - b. It is more economical to import the commodity and give in exchange a commodity for which the area is better suited
 - c. There is the risk of diverting resources into wrong channels
 - d. The industry will never in fact grow up. It will always claim to be "infant."

to

6. Tariffs are not needed to protect a country against the risks of over-specialisation, for no country is so over-specialised
 - a. Specialisation is necessary to secure the advantages of division of labour
 - b. Losses and gains are balanced out

to

7. Tariffs may be able to secure perfect independence of foreign food supplies and war supplies, but only
 - a. At the risk of losing all the advantages of specialisation, division of labour and of trade
 - b. Logically then the country should divert all its resources to preparation for war

to

8. Tariffs might in very exceptional circumstances make the foreigner pay, but
 - a. If the imported goods are dear, then the consumer suffers
 - b. If the same amount is sold, then it affords no protection to the native industry
 - c. The foreigner might be made to pay if the country had a monopoly of a commodity of inelastic demand by imposing a duty on *exports*. Such a condition is rare.

Free Traders claim that the highest standard of living is only possible when

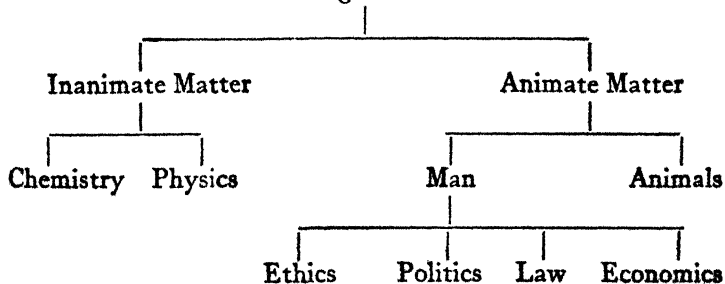
- a. The world's resources are applied to the production of goods in those areas which have the greatest relative advantages
- b. That the economic interdependence of the world results in
 - i. Greater productivity
 - ii. Lower price per unit of production
- c. That tariffs once imposed are difficult to remove, for they create vested industries
- d. They encourage monopolies.
- e. Business men turn to the government for protection rather than reorganise their industry

CHAPTER XX

THE DEVELOPMENT OF ECONOMIC SCIENCE

Learning can be divided as follows

Knowledge or *Scientia*



Economics is then a Social Science dealing with Man in his relations to other men in the sphere of earning his living and spending his earnings.

Because it deals with Man

- I. Bias is more probable than in dealing with other matter

2. It is difficult to divide off this science from other social sciences

3. It is difficult to conduct any experiments

Economic Laws then might be true only if it were possible to isolate Economic Man entirely. For the purpose of study however such an Economic Man is assumed. Economic Laws are tendencies not unfailing rules.

If it is objected that it is not a science because:

1. Theories now discarded have passed as laws

2. Economists differ

then

1. The same is true of all physical sciences

2. In addition, it is essential to have exact knowledge on such an important department of life

Economic Science passes through the three stages of all sciences

1. Hypothesis

2. Theory

3. Law

and it follows the usual scientific methods of

1. Deductive method, reasoning from certain axioms

2. Inductive method reasoning from many and varied data

CHAPTER XXI

THE POPULATION PROBLEM OF THE TWENTIETH CENTURY

In 1798 Malthus wrote his book on Population which resulted in:

1. Greater concern in our population problems

2. The first Census being taken in 1801

From 1801 to 1871 every Census recorded an increasing birth rate, a decreasing death rate, and a growing population.

Our Victorian prosperity was based on an expanding population.

The Death Rate is measured by the number of people who

die every year, in proportion to every 1000 of the population.

The Birth Rate is measured by the number of children born every year in proportion to every 1000 of the population.

* These rates will vary according to:

1. The Age Composition of the people
2. The proportion of men and women in the population.

The Natural Increase of a people equals the excess of births over deaths.

From the 1870s the birth rate began to fall. Till the '70s our population increased, and many people feared the Malthusian forecasts, that population would outgrow food supply.

Since the '70s the British people have been growing:

1. Older
- and 2. Smaller in numbers

There has been a close relation between Population and Power in the world.

The phenomenon of ageing and declining peoples has affected the entire White population of the World—except the Russians.

The future population can be foretold by:

1. The Fertility Rate
- and 2. The Net Reproduction Rate

The Fertility Rate is the number of births per 1000 women between the ages of 15 and 50 in any year.

The Net Reproduction Rate is the average number of girls that will be born in the future by a girl born now.

The Net Reproduction Rate in 1930 for England and Wales was 0.8. If the Net Reproduction Rate were Unity then:

1. The total population would remain stationary
- and 2. The Age Composition of the population would remain stable

Some possible economic consequences of a falling population:

1. Population may fall below the Optimum Figure. We may become a poorer as well as an older people
2. Production may outstrip consumption and thus

- create unemployment. But the decline in numbers might be offset by a rise in living standards
3. It may remove the recovery-factor in a slump. But this might be met by a full employment policy
 4. The ageing age-composition of the people may be reflected in new demands and consequently new types of goods and services
 5. There may be a decline in inventiveness and in the pioneering spirit. The dominance of the aged will become pronounced
 6. It may create growing immobility of labour
 7. An older people will have greater burdens:
 1. Greater costs of all public utilities
 2. Greater burden of the National Debt per head of the population
 8. Our Social Services may become a heavier charge per head of the population. A smaller productive population will have to support a larger pensionable population.
 9. The problem of emigration may grow acute. Is it wise to permit the most productive elements in the population to give their capacity to a land that has not contributed to their training, and withdraw it from a land that has provided their skill?
 10. Should we fail in a civilising duty to posterity by not checking depopulation?

CHAPTER XXII

THE PROBLEM OF INTERNATIONAL TRADE AND FOREIGN EXCHANGE

The Wars of the Twentieth Century have resulted in:

1. A desire for self-sufficiency, or Autarchy
2. An emphasis on economic nationalism

The Bank Charter Act of 1844 regulated the quantity of currency in Britain. The country was then on the Gold Standard, which meant:

1. The Mint Rate and the Bullion Rate were identical
2. The right of Free Mintage obtained
3. Notes and Gold were convertible on demand
4. Gold was freely exported and imported

Then in 1914 there came the First World War. It was financed by:

1. An Issue of Paper Money, *i.e.*, Inflation
2. A large internal loan
3. Increased taxation
4. The sale of foreign investments
5. Large borrowing from the U.S.A.

As a result, the £ Sterling lost its pre-war value. In order to avoid the disastrous results of inflation, in Britain, in 1925 was passed the "Churchill" Gold Standard Act which restored the Gold Standard. This drastic deflation created new problems.

In 1928 the Currency and Bank Note Act was passed, which increased the Fiduciary Issue.

The Monetary problems were complicated by the post-war economic difficulties, that led to and created the Economic Crisis.

In 1931 the Currency Devaluation Act was passed that devalued the £ Sterling.

In face of the International economic situation there were created:

1. The Sterling Area,
- and 2. The Exchange Equalisation Account, set up by the Finance Act of 1932

For in the period 1919-1939, Trade had already suffered from such autarchic devices as:

1. Tariffs
2. Quotas
3. Preferences
4. Exchange restrictions
5. Lowering the value of currencies

Exchange was facilitated between countries which voluntarily came into the Sterling Area.

The Exchange Equalisation Account:

1. Corrected any lack of balance in the exchange
2. Provided for exchanges with countries that adhered to the Dollar
3. Dealt with speculative attacks on the currencies

For speculation may be in:

1. Commodities
2. On the Stock Exchange
3. Currencies

In a world of risk, speculation may be socially of value, if it:

1. Lessens price fluctuations
2. Averages supply and demand
3. Makes possible steadier prices and so enables production to run more smoothly

Of course speculation may be socially harmful. It was one of the aims of the E.E.A. to prevent speculative attacks, "bear attacks", on the £ Sterling.

In 1939 the second World War broke out.

1. The Government passed the Currency Defence Act
2. The Fiduciary Issue was further raised

The Sterling Area was revived as a Bloc, as a result of the war.

The economic and financial uncertainties led to plans for financial co-operation:

The Keynes Plan,
The White Plan,

both of which have certain elements in common:

1. The creation of some kind of international bank
2. The creation of a new international monetary unit
3. Creditor countries to *pay a charge* for their holding in the international bank

In 1945 the Bretton Woods Agreement was signed to create:

1. An International Monetary Fund
2. An International Bank for Reconstruction and Development.

CHAPTER XXIII

THE PROBLEM OF CURRENCY AND THE BANK OF ENGLAND

In 1694 the Bank of England was founded.

Although in law it was a private company, it was in fact a national institution.

In 1797 it suspended cash payments which were only resumed in 1821.

This experience predisposed the nation in favour of sound money. The Bank was regulated by Acts of Parliament, the Bank Acts of 1826, 1833, and Peel's Bank Charter Act of 1844.

By the Bank Charter Act of 1833:

1. Bank of England Notes became legal tender for sums over £5
2. Joint Stock Banks were legalised within a 65 miles radius

This made possible the formation of what later became the Big Five.

By Peel's Bank Charter Act of 1844:

1. Note Issue Banking was divided from Deposit Banking
2. The Issue Department was to have a gold backing for Notes issued, except the Fiduciary Issue
3. Notes and gold were interchangeable
4. The Bank was to publish a weekly *Return*

As the Government's Bank the Bank of England receives the Revenues of the nation.

From this, the Government pays:

1. The Consolidated Fund Charges, the regular payments to:
 - a. The Royal Family
 - b. Judges
 - c. Interest on the National Debt
2. The Annual Appropriation Bills for the service of the State

The Government further borrows from the Bank of Eng-

land by Exchequer Bills. They form the Floating Debt.

The Bank of England has also become the Bank of the Joint Stock Banks.

The Joint Stock Banks can create credit money by:

1. Granting Loans. "Every loan creates a deposit"
2. Discounting Bills
3. Loans to the Money Market
4. Buying Government Securities
5. Buying new premises

The Bank of England can also create credit money by:

1. Ways and Means Advances
2. Discounting Bills and Government Loans
3. Loans on the Money Market
4. Purchase of Gold
5. Open Market Transactions

There were criticisms of the Bank Charter Act:

1. It tied the hands of the Bank too rigidly
2. Production of goods might outrun the volume of money
3. In every crisis the Bank Act was suspended

The Bank Act was again suspended when war broke out in 1914. But in 1925 we again returned to the Gold Standard.

In 1928 by the Currency and Banking Act the Fiduciary Issue was again raised.

In 1932 by the Currency Devaluation Act the £ Sterling was devalued.

When war broke out in 1939:

1. The Fiduciary Issue was again raised
2. The E.E.F. was used for war purposes

The demand became more vocal for the Nationalisation of the Bank of England.

Those who wished it argued:

1. That the national character of the Bank of England should be recognised
2. That Statute should regulate what had grown up in fact
3. That the control and regulation of the amount of

money in circulation should be under the control of law

Those who opposed nationalisation argued:

1. That it was an untried theory
2. That Government control was already sufficiently effective
3. That the Act of 1928 had given to the Government the profit of an increase of credit money

In 1945 by the Dalton Bank Act, the Bank of England was nationalised:

1. The Bank of England was transformed into the Bank for England
2. The Crown re-established its ancient right of being the sole source of the medium of exchange in the realm
3. The Shareholders were compensated by receiving Government Stock at 3%

CHAPTER XXIV

THE PROBLEM OF FULL EMPLOYMENT

The question of full employment has become urgent in the twentieth century because of:

1. The experience of the rhythmic character of slump and boom
2. The fact that wars in the twentieth century have "cured" unemployment
3. The newer conception of the functions of the State.

Unemployment is a moral and a political as well as an economic problem.

Because of the fear of unemployment:

1. Men have opposed technical improvements and been hostile to machinery
2. The entry of women into industry has been feared
3. Aliens' Laws have prevented immigration of labour

4. Trade Unions have demanded long apprenticeship and high subscriptions

Unemployment:

1. Wastes the productive activities of the community
2. Has led to the waste of goods, when produced
3. Demoralises the unemployed, whether rich or poor

Employment or work is not aimless self-fatigue. It implies the sale of effort and skill for an income.

Insurance does not cure unemployment. It alleviates the distress consequent on unemployment.

Unemployment can be divided into:

1. Structural—when too large a labour force remains attached to an industry or an area
2. Mass unemployment

The two varieties are in practice interwoven.

Unemployment is increased by the immobility of labour.

Frictions that prevent the mobility of labour may be:

1. Ignorance
2. Incapacity to work to new techniques
3. Legal factors
4. Local loyalties
5. Human inertia

The State has attempted to modify these frictions by:

1. Labour Exchanges
2. Controlling the location of industry to:
 1. Mix employment
 2. Prevent unsuitable siting
 3. Create "development areas"
 4. Provide training and re-training for new industries

General or Mass unemployment reached disturbing figures during the Economic Blizzard of 1929-31.

A cause of general unemployment is a decline in total monetary expenditure.

Employment depends on spending. Employment creates employment.

The total spending can be divided into:

1. Private
2. Public
3. Foreign

When individuals spend they buy either:

1. Consumption Goods
2. Production Goods

They buy Consumption Goods directly.

They buy Production Goods indirectly, by Investments.

When a person buys Production Goods he has to wait for a return, so this form of spending is known as Saving.

Spending and Saving however are both Outlay.

The Government too spends on Present goods and saves or buys Production or Future Goods.

So do semi-public bodies such as the B.B.C., Dock and Harbour Boards, as well as the Local Government Bodies.

When foreign companies buy here, they too add their outlay to the total outlay that determines the range of employment here.

Unemployment generally begins in the Construction Industries, because:

1. Investment is unstable
2. A psychological depression precedes the actual depression
3. Construction Goods are durable
4. Many other industries depend on the industries that may feel this psychological depression

And the slump once begun deepens, because:

1. Unemployment creates unemployment
2. The Government itself is affected. It begins economy cuts

So it has been suggested that unemployment might be mitigated by:

1. The Government inaugurating a policy of public works, although such a policy should be prepared beforehand

2. The Government acting in an anti-cyclical direction by:
 1. Not making cuts in salaries
 2. Maintaining spending
3. The Government not balancing its budget for the particular year in question, by having a budget for longer than a year
4. The Government varying:
 - a. Income Tax,
 - b. Social Insurance premiums, increasing them when employment was general, and decreasing them when unemployment rose, so that the monetary expenditure might remain relatively stable

Other economists wish to be more radical in their treatment to create full employment for all, to maintain total monetary expenditure, so as to produce full employment for all.

They envisage:

1. A new kind of Budget by the Minister of National Finance, who would plan the total outlay so that it equalled the productive capacity of the people
2. An Economic General Staff to plan the nation's resources, which would deal with man-power, productive capacity, national resources and equipment

The Minister should plan outlay by fostering:

1. Private consumption
2. Private investment
3. Public spending
4. Exports

He might encourage private consumption by:

1. A comprehensive scheme of social insurance
2. Bulk purchase and distribution, at controlled and variable prices
3. A comprehensive Housing Plan
4. A National Health Service

5. A "free" distribution of goods, to maintain full production
6. Improving the nation's equipment

He might foster exports by:

1. Increasing the efficiency of producers
2. Long term contracts
3. A guaranteed market
4. Securing a stable market for our goods abroad, although it might be more difficult to secure such stability of exchanges of goods with another industrial country

Planning for full employment may also mean planning for its implications:

1. Planning for total outlay
2. Planning for a new type of budget
3. A Planned currency
4. A National Wages Policy
5. A Planned Price Control
6. And it raises the problem of industrial discipline

QUESTIONS

CHAPTER I

1. In what respects could the following be classified as producers: a judge, a soldier, an architect, a tax collector, a shop assistant, a farmer?
2. How would you classify human wants? How far does their study help in understanding the problem of production?
3. What are the differences between the production of commodities and of services?
4. How would you define an industry? What kinds of industries are there in our present economic society?
5. Explain what is meant by the Law of Satiableness of Wants. What conclusions would you draw from this Law?
6. How far would you agree that our wants are (a.) Competitive, (b.) Complementary? Would this classification apply to commodities only? Or would it apply equally to services?

CHAPTER II

1. Distinguish carefully between Wealth and Capital. What differences are there between them and what similarities have they?
2. On what personal factors does the efficiency of labour depend? Does a man's productivity depend entirely on his own efforts?
3. What is the function of capital in the productive process? What is meant by material and non-material capital?
4. Examine the view that only the extractive industries have the right to be considered productive.

5. Examine the relation between the population of a country and the labour supply of that country. How could the productivity of that population be increased?
6. What exactly do you understand by the phrase "the factors essential if production is to take place"?

CHAPTER III

1. Do you think that the advantages of the division of labour outweigh the disadvantages? What do you regard as the main advantages of specialisation?
2. Do you agree that there are now more personal services than formerly? Can you give reasons for your answer?
3. "Division of Labour alone is sufficient to account for the difference between the condition of primitive man and the man of Western Europe in the twentieth century." Do you agree with this statement?
4. Why is industry so localised and concentrated? What advantage is gained by the localisation of industry?
5. What factors are at present helping to de-localise industry?
6. Why is the specialisation in the making of motor cars more intense than in the growing of corn?

CHAPTER IV

1. Account for the survival of the small firm in face of the fierce competition of the large firm.
2. Give in detail what you regard the chief economies of Large Scale Industry.
3. Explain the value of (a.) Organisation, (b.) Risk Taking, to industry. Do you agree that they should be included among the Factors of Production?
4. Account for the remarkable growth of the Joint Stock Company with Limited Liability.
5. Mention any three industries which are organised on a Small Scale and three which are organised on a Large Scale and account for the difference.

6. Why is industry conducted (a.) ahead of demand (b.) in anticipation of demand? What advantages are secured thereby and what disadvantages?

CHAPTER V

1. How far would you agree that our present society is a Competitive Society? What economic advantages are secured?
2. What forces are there making for Combination in industry? How far are they successful?
3. Analyse the various types of combinations in industry. Which do you consider the most powerful?
4. What special economic advantages has the Co-operative Society over the ordinary store?
5. Account for State control over "Technical" Monopolies.
6. What are the limits of Large Scale Industry?

CHAPTER VI

1. How would you explain why England was able to support four times as many people in 1930 as in 1830?
2. Explain the application of the Law of Non-Proportional Returns to the Extractive Industries, the Constructive Industries and the Commercial Industries.
3. What do you mean by the Optimum Population of a country? What are the difficulties in calculating the Optimum Population for any particular country?
4. Compare the populations of China and Australia. What arguments would you use to prove that China was over-populated and that Australia was under-populated?
5. Explain what is meant by the Law of Diminishing Returns. Why is it important?
6. What hindrances are there to the Optimum Distribution of the Population between different areas and different occupations?

CHAPTER VII

1. Account for the large number of followers of the Labour Theory of Value. How would you criticise this Theory?
2. What resemblances and what differences do you find between the Labour Theory of Value and the Cost of Production Theory of Value?
3. Explain and illustrate the Law of Diminishing Utility. Are there any exceptions to this Law?
4. What is meant by the Paradox of Value? How does the Marginal Utility Theory of Value solve the difficulty?
5. Criticise the following statements:
 - a. Price depends upon the utility of goods and services.
 - b. The price of goods and services depends on the cost of producing them.
 - c. The price of motor cars is high, because of the enormous labour required to make them, while the price of chairs is low because little labour is needed to make them.

Which is the correct statement?

CHAPTER VIII

1. What causes affect the elasticity of the supply and the elasticity of demand of commodities?
2. In what respects is Monopoly price determined in a different way from competitive prices?
3. "The scarcer an article is, the more valuable it is. In order to be wealthy, therefore, society should attempt to make things scarce." Do you agree?
4. What relations exist between the prices of articles in commodities of joint supply?
5. What are the chief functions of prices in economic society?

CHAPTER IX

1. What are the services rendered by a good currency in modern economic society?
2. What is meant by the Gold Standard? Explain why England adopted a Mono-metallic Gold currency.
3. What are the advantages of Paper Money? Do you agree that Paper Money always means inflation?
4. Do you think that Gresham's Law has been borne out by events since the Great War?
5. There is far more money in England to-day than before the war. Does that mean that England is richer?

CHAPTER X

1. How would you distinguish between Depreciation and Debasement of the currency?
2. Who would benefit and who would suffer under Inflation and under Deflation? Explain why.
3. "Periods of inflation are periods of active trade, little unemployment, rising wages and high profits." What arguments would you use against those who would suggest that, as inflation causes these very desirable results, why should not then the country issue paper money and inflate?
4. Explain the value, the use and the construction of Index Numbers.
5. State carefully and clearly the Quantity Theory of Money. Of what practical application is this theory?

CHAPTER XI

1. Indicate the main functions of the Banker. How can he lend out more money than is actually deposited with him? What dangers has he to face in so doing? How does he surmount these dangers?

2. What are the chief effects of the Credit system on production?
3. If war makes a country poorer, why have deposits in banks increased since the War?
4. Write out the balance sheets of (a.) a Joint Stock bank, (b.) the Bank of England. Indicate the meanings of the various items.
5. What is meant by
 - a. The "bankers' dilemma"?
 - b. The "art of banking is being able to distinguish between a bill of exchange and a mortgage?"
 - c. "The banker exchanges money for credit and credit for money"?
 - d. "A banker makes his profits by adding to the media of exchange"?

CHAPTER XII

1. Give an account of the English money market. What transactions are carried out on this market?
2. Distinguish carefully between the price of money and the value of money.
3. What are the main advantages of International Trade? How are the goods paid for?
4. "It may pay a country to import a commodity which she can produce more cheaply herself." How do you account for such a statement?
5. "Exports pay for imports." How do you reconcile this statement with the fact that purchases of foreign goods are paid for in money?

CHAPTER XIII

1. Explain carefully what is meant by the term the National Income. What difficulties are there in arriving at the figure?
2. Examine the relation between wealth and welfare. If you knew that (a.) two countries; (b.) two individuals had the same incomes, how far would that help you to estimate their welfare?
3. What are the main sources of income at the present day? Have people always obtained their incomes in the same way?
4. If you were appointed dictator, what methods would you adopt to increase (a.) the wealth, (b.) the welfare of the community?
5. Explain the following terms:
 - a. The "subjective costs" of industry.
 - b. Gross Income and Net Income.
 - c. Non-Material Equipment.
 - d. Income and Capital.

CHAPTER XIV

1. Examine the two statements, "Rent is an unearned increment," "Rent is a surplus not a cost." Do you agree with them?
2. Explain carefully the terms *Quasi-Rent*, *the Rent of Ability*.
3. Contrast land as a factor of production with capital and labour. Would rent disappear if land were unlimited in amount, and if land were not subject to the law of non-proportional returns?
4. What resemblances exist between the rent of land, the profits of business, and the interest on capital?
5. What economic problems would arise if an attempt were made to abolish rent and interest?

CHAPTER XV

1. Discuss the chief difficulties in assessing the Real wage from the Money wage actually received.
2. Distinguish carefully between "Subsistence" and the "Standard of Life." Which of these two do you think has any influence on wages?
3. Explain why it is that (a.) Wages are generally higher in Canada than in England, (b.) and in England than in China.
4. Mention some of the special problems arising from the demand and supply of labour. What difficulties arise in applying the general theory of value to the wages of labour?
5. Suppose that all the barriers which now prevent women obtaining employment in certain industries were removed. What effect would you expect to follow on (a.) The wages of women, (b.) The wages of men?

CHAPTER XVI

1. "Interest is the price of abstinence." "Interest is the price of time." Explain these theories. Which is the more correct?
2. Indicate the chief factors which determine the rate of interest.
3. What other elements are included in the ordinary term "profits"? Why does the rate of profits vary both within an industry and also from industry to industry?
4. What arguments would you use to prove that the rate of interest will either rise or fall?
5. Compare carefully the rent of land with interest on capital and with profits of industry.

CHAPTER XVII

1. What are the chief services of the middleman? What influence has his efficiency on the volume of employment?
2. "Wars and earthquakes are not unmixed blessings. They create work." Criticise this statement.
3. What do you think are the chief causes of unemployment in England since the War?
4. Examine carefully the influence of machinery on unemployment and distinguish between its influence (*a.*) in the short run, (*b.*) in the long run.
5. If you were appointed dictator, what measures would you take to cure unemployment?

CHAPTER XVIII

1. Why are taxes levied? What do you think is the function of taxation? Compare the taxation in a backward and in a progressive country.
 2. "Taxation is an evil, but a necessary evil, and the statesmen should aim at its reduction to a minimum." Do you agree?
 3. What is meant by the term "Income from civic rights"? How is such income obtained? Do you think that this income might be increased or decreased?
 4. What do you understand by the Subjective Costs of industry? How far can the state reduce them without injuring industry?
 5. Explain carefully what is meant by the Canons of Taxation. How far are they acted upon by the state?
- 4.
- 5.

CHAPTER XIX

1. "If we are to maintain the high standard of living of our workers, then we must protect them against sweated labour by means of a tariff." Would you agree to this statement?
2. Some people think that it is absurd to buy from the foreigner commodities that can be produced at home. Do you think so too?
3. Criticise the theories of trade accepted by the Bullionists and the Mercantilists.
4. Some Protectionists agree that the advantages of Free Trade are numerous. Yet they would impose a tariff under certain conditions. Can you say which these conditions are? Can you answer the main arguments for such a tariff?
5. The post-war conditions have produced special problems of their own. What are the main arguments for a Tariff and against a Tariff, as a cure for some of these special problems?

CHAPTER XX

1. In what respects would you say that Economics is a science?
2. "Self interest is to economics what the law of gravity is to physics." Do you agree?
3. Examine the influence of the English Classical School of economists on English legislation during the first half of the nineteenth century.
4. "The Theory of Economics does not furnish a body of settled conclusions immediately applicable to policy. It is a method rather than a doctrine." Do you agree?
5. It is said that Economic Society is based on the maxim, "Do what pays you best." Would you regard this maxim as an economic law? Criticise the maxim.

CHAPTER XXI

1. Compare the population problem in England at the beginning of the nineteenth century with that at the beginning of the twentieth century.
2. What do you think may be some of the economic consequences of the changing drift of our population?
3. How far has the Malthusian theories of population been justified by the trends in our population during the last half century?
4. Give an account of the influences on legislation of:
 1. The Malthusian Theories of the nineteenth century?
 2. The population trends of the twentieth century?
5. Explain carefully:
Birth Rate, Death Rate, Natural Increase of a people, Fertility Rate, Net Reproduction Rate.

CHAPTER XXII

1. How were the two World Wars of 1914-18 and 1939-45 financed?
2. Give an account of the fortunes of the Gold Standard since 1914.
3. Show how the policy of autarchy expressed itself during the inter-war period of 1918-39.
4. Analyse the implications of speculation in the modern world.
5. Give an account of the working of the Exchange Equalisation Account.
6. State the reasons for setting up the Sterling Bloc. How does it function?

CHAPTER XXIII

1. Explain the meaning of the following:
Treasury Bills, Floating Debt, Consolidated Fund Charges, Appropriation Bills.

2. "Every loan creates a deposit." Explain this statement.
3. What is meant by:
 Open Market Transactions?
 Ways and Means Advances?
4. Give an account of the work of the Bank of England today.
5. Why was the Bank of England nationalised in 1945?
6. Show how Banks add to the volume of money in circulation.

CHAPTER XXIV

1. On what grounds would you justify Government intervention in the economic field to secure full employment?
2. What would you say were the causes of:
 a. Structural unemployment?
 b. Mass unemployment?
3. Can you account for the mass unemployment in Britain during the Economic Blizzard 1929-31?
4. Give an account of the frictions that prevent the free flow of labour where it is needed. Show how they increase unemployment. What are some of the plans of the Government to mitigate these frictions?
5. Explain why employment creates employment, and unemployment creates unemployment.
6. Explain what is meant by "a planned economy".

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